



Medikal Sistemler Ltd.

TAM OTOMATİK
Agarose Jel

ELEKTROFOREZ SİSTEMİ



INTERLAB G26 MICROGEL

- Interlab, elektroforez otomasyonunda dünya lideridir.
- Interlab G26 modeli, şu anda mevcut sistemler içinde, full otomatik Agarose Gel Elektroforezi olarak en kompakt sistemdir.
- Interlab G26, Altın Standard Agarose Gel tekniğini kullanarak hızlı, güvenli ve otomatik gel elektroforez sonuçları üretilmesini ve laboratuvarların böylesine zor ve zahmetli bir konuda kolay çözüme ulaşmasını sağlayan bir sistemdir.

Gold Standard AGAROSE JEL Elektroforez Testleri

Cihaz Özellikleri

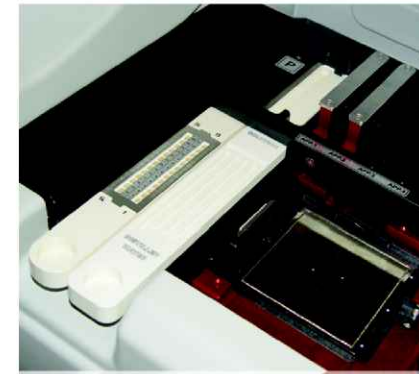
- Komplet walk-away otomasyon
- 38 dakikada ilk 26 test sonucu (Microgel: 50 dakikada ilk 52 test sonucu)
- Saatte 78 protein elektroforezi test sonucu (Microgel: 110 dakikada 208 PE test sonucu)
- Isı Kontrollü migration chamber
- 10-60°C arasında ısı kontrolü
- 2 veya 3 elektrodlu, uniç flexible migration chamber
- 8 gel (208 test)' in sürekli yüklenmesi olanağı, aynı ya da farklı test gruplarının birlikte çalışılabilmesi.
- Kolay sonuç değerlendirme olanağı
- Sonuçların hem görsel, hem de densitometre sonucuyla birlikte izlenebilmesi
- Disposable sample plates
- Cihazdan PC' ye otomatik veri transferi
- Kompakt ve modern dizayn, az yer işgali

Software

- Kolay data yönetimi, Elfolab software
- Etkin grafik oluşumu, hasta sonuçlarının izlenmesini kolaylaştırır
- Uniç Interlab Gel ID, hastanın daha önceki sonuçlarıyla kolay kıyaslama olanağı sağlar
- Levey-Jennings grafikleriyle 3 düzeyli kalite kontrol fırsatı
- Host Connection

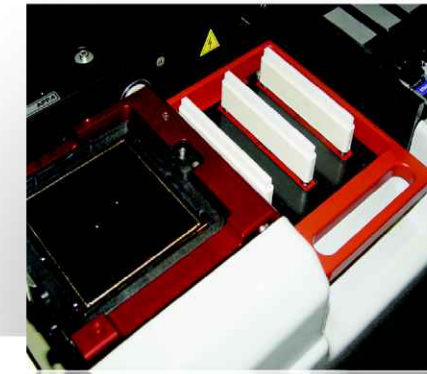
Genel Özellikler

- Voltaj : 90(260 VAC - 50 / 60 Hz)
- Ağırlık : 45 kg (Microgel : 107 kg)
- Ölçüler : 85x50x53 cm (Microgel : 108x71x68 cm)
- Bağlantı : USB (Microgel : RS-232)



Otomatik Örnek Yükleme

Örnek yüklemesi tamamlanır tamamlanmaz, aplikatör uçları otomatik olarak yıkama yapar. Aplikatörler, manyetik sistemle ve otomatik olarak kontrol edilirler. Aplikasyon zamanı, aplikasyon pozisyonu, aplikasyon sayısı gibi tüm aplikasyon parametreleri, istenildiği oranda değiştirilebilir ve programlanabilir.



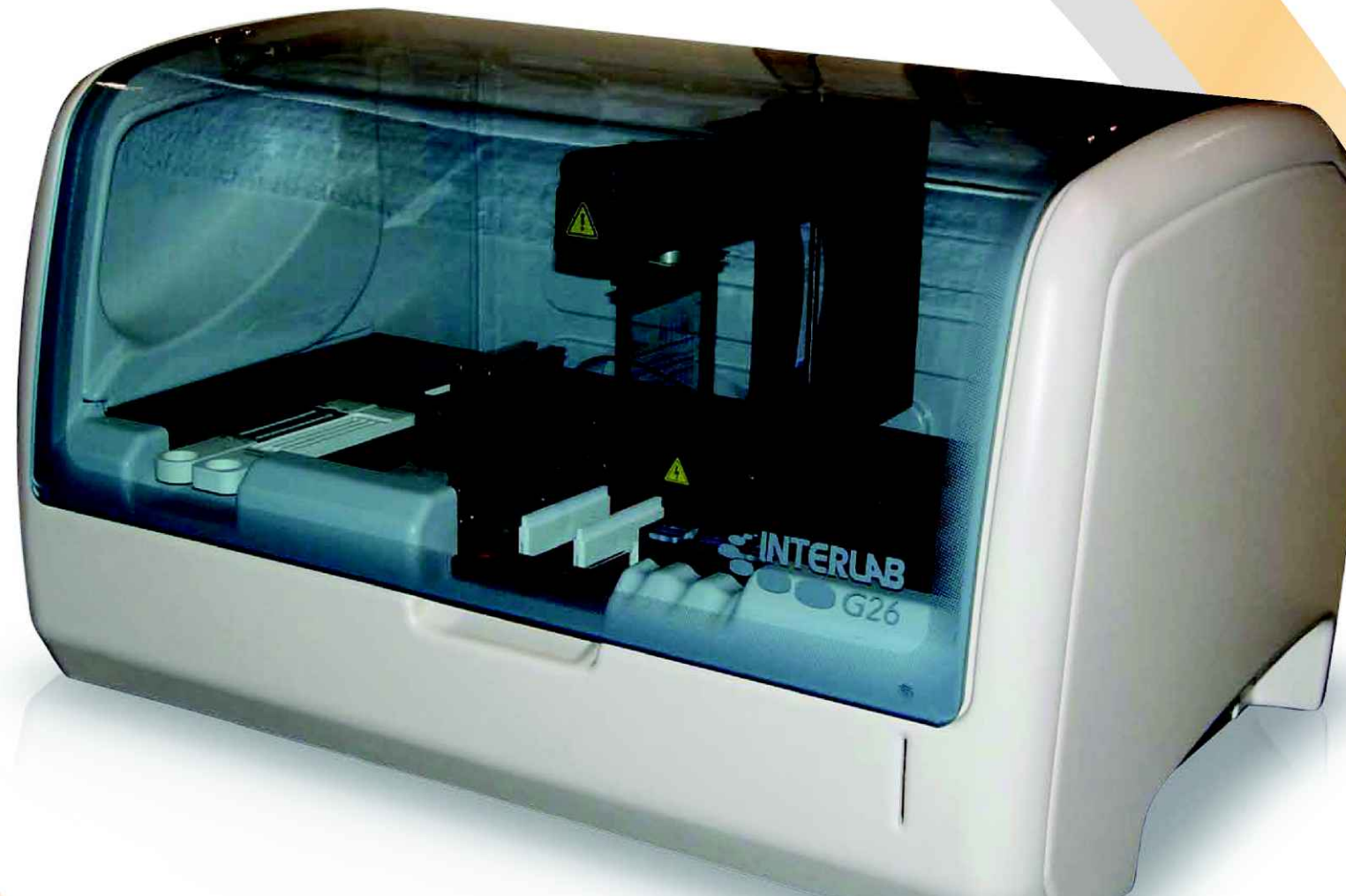
Migration Chamber Modülü

26 serum protein elektroforezinin 7 dakikada göçünü sağlayacak ve mükemmel bantlar oluşturabilecek verimlilikte ısı kontrollü ve voltaj ilişkilidir. Üç elektrod, iki sıra halinde elektroforez göçüne fırsat sağlar. Paralel ve sıralı, yüksek kaliteli sonuçlar oluşur.



Otomatik Kontrollü Mekanik Kollar

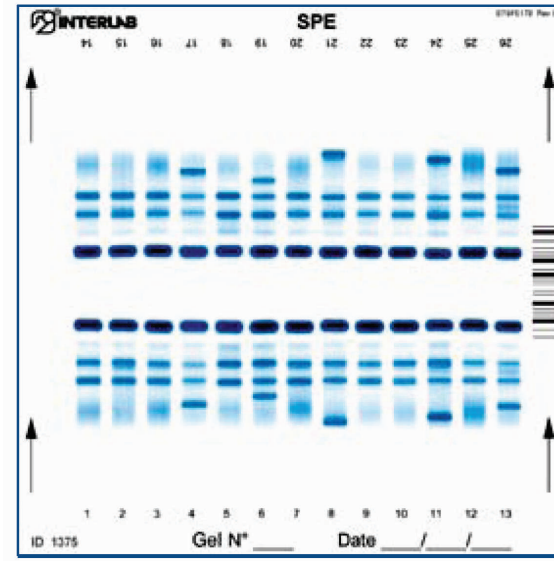
Farklı deney fazları arasında, mekanik kollar otomatik olarak ve manyetik sistemle kontrol edilir ve bu esasa göre hareket ederler. Gel, otomatik olarak aplikasyon bölümü, migration chamber, reaksiyon bölümü ve sonunda densitometre gibi bölümlere hareket eder ve buradan da elektroforez grafikleri PC' ye aktarılır. Mekanik kollar, farklı deneyler barındıran 2 gel içeriğini hızlı ve flexible biçimde yönlendirecek ve sonuçlandıracak özelliğe sahiptir.



TAM OTOMASYON

Interlab G26, gerçek anlamda agarose gel elektroforezi otomasyonu sunan en son tam otomatik kompakt sistemdir. Örnek hazırlanmasından gel okumasına kadar, tüm elektroforez aşamaları tam otomatiktir.

Interlab G26, aynı zamanda ileri bir mühendislik dizaynı ve software ile birlikte, klinik elektroforez testlerini standardize yöntemle, hızlı ve esnek şekilde sonuçlandırma fırsatı sağlamaktadır.



AGAROSE JEL INTERLAB TEST SEÇENEKLERİ

- Serum Protein Elektroforezi
- İdrar Protein Elektroforezi
- $\beta 1$ - $\beta 2$ Protein Elektroforezi
- Immunofixation Elektroforezi (Acid Blue)
- Immunofixation Elektroforezi (Acid Violet)
- Pentavalent Immunofixation
- Bence-Jones Immunofixation
- HR (High Resolution) Protein Elektroforezi
- Hemoglobin Elektroforezi (Alkaline)
- Hemoglobin Elektroforezi (Acid)
- Lipoprotein Elektroforezi
- LDH Isoenzymes Elektroforezi
- Alkalen Fosfataz Isoenzymes Elektroforezi
- CK Isoenzymes Elektroforezi
- BOS Oligoklonal Band Elektroforezi

Protein Electrophoresis kit Serum Proteins and Concentrated Urines

The new kits with enhanced formulation for Serum Protein Electrophoresis (SPE) and Concentrated Urines, SRE600K and SRE601K, are intended for the separation of proteins in human serum and concentrated urines by electrophoresis on agarose gel plates. Human serum proteins are separated into five distinct, well-resolved zones or bands, each containing one or more different proteins. The patterns are examined visually for abnormalities and variations in the separated bands or zones. Densitometry of the patterns allows the relative quantification of protein zones.

Kit content

Gel Plates	10	Acid Blue Stain	1
Blotting Paper	10	Applicator Washing Sol.	1
Buffered Sponges	20/30	Disposable Sample Plates	10

Reagent Preparation

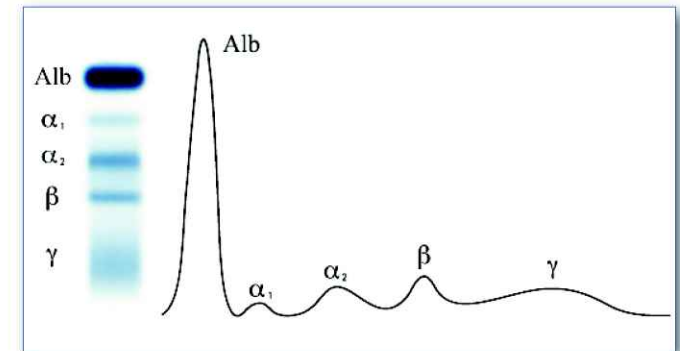
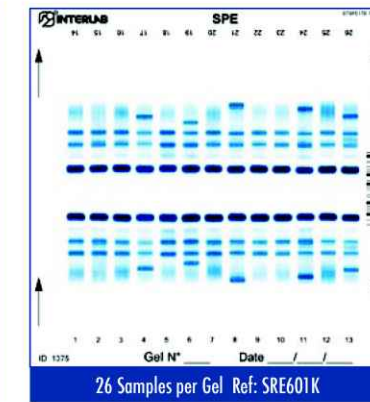
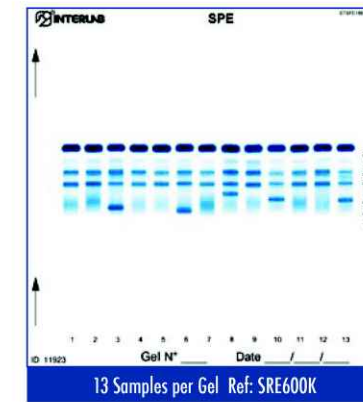
Reagents are ready to use, only the Stain has to be reconstituted with 900 ml of distilled water. All may be stored at room temperature.

Sample Preparation

Neat serum samples. Concentrated urines to a final total protein concentration ≥ 20 g/L.

Sample Storage & Stability

Serum: 1 week at 2 to 8°C
Urine: 1 week at 2 to 8°C, and 1 month at -20°C



Protein Electrophoresis kit Serum Proteins $\beta 1$ - $\beta 2$ and Concentrated Urines

The new kits with enhanced formulation for Serum Protein and Concentrated Urine ($\beta 1$ - $\beta 2$ Electrophoresis (SPE)) SRE602K and SRE603K, are intended for the separation of proteins in human serum and concentrated urines by electrophoresis on agarose gel plates. Human serum proteins are separated into six distinct, well resolved zones or bands, each containing one or more different proteins. The patterns are examined visually for abnormalities, including variations of the bands or appearance of extra bands. Densitometry of the pattern allows the relative quantification of protein zones.

Kit content

Gel Plates	10	Acid Blue Stain	1
Blotting Paper	10	Applicator Washing Sol.	1
Buffered Sponges	20/30	Disposable Sample Plates	10

Reagent Preparation

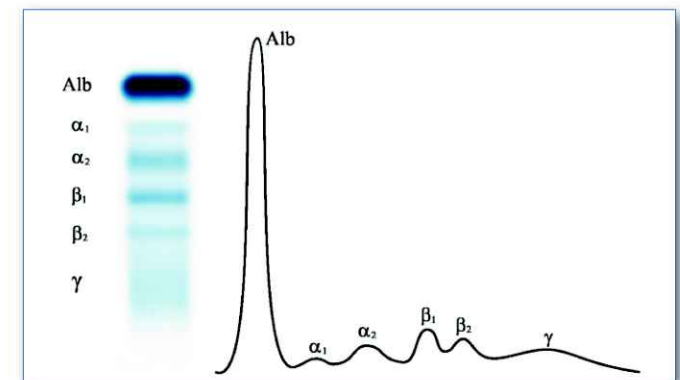
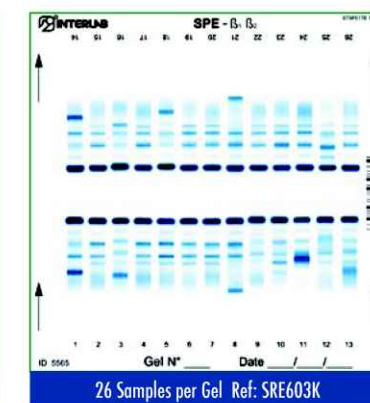
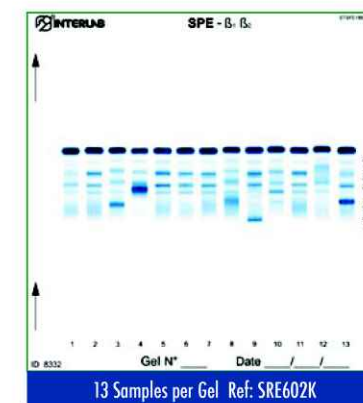
Reagents are ready to use, only the Stain has to be reconstituted with 900 ml of distilled water. All may be stored at room temperature.

Sample Preparation

Neat serum samples. Concentrated urines to a final total protein concentration ≥ 20 g/L.

Sample Storage & Stability

Serum: 3 days at 2 to 8°C
Urine: 1 week at 2 to 8°C, and 1 month at -20°C



Serum & Concentrated Urine Immunofixation Acid Blue Stain

The new Immunofixation Electrophoresis (IFE) kits SRE623K and SRE624K are intended to be used for qualitative immunological identification of monoclonal components in human serum and in concentrated urines. No sample dilution is required! Thanks to the Interlab G26 and to the Easy Mask the Immunofixation procedure is extremely fast and user friendly and in just 43 minutes the first gel with 2 or 4 IFE results is completed.

Kit content

Gel Plates	10	Applicator Washing Solution	1
Blotting Paper A	30	Washing Sol. 1 for Immunofixation	1
Blotting Paper L	10	Washing Sol. 2 for Immunofixation	1
Blotting Paper G	10	Immunofixation Diluent	1
Buffered Sponges	20	Disposable Sample Plates	10
Acid Blue Stain	1		

Reagent Preparation

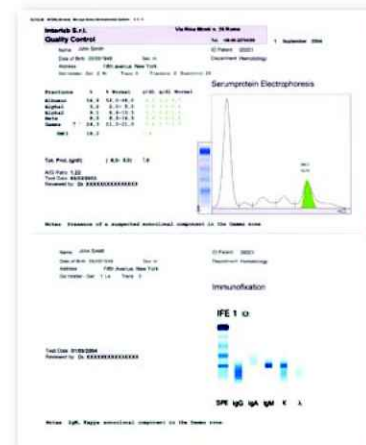
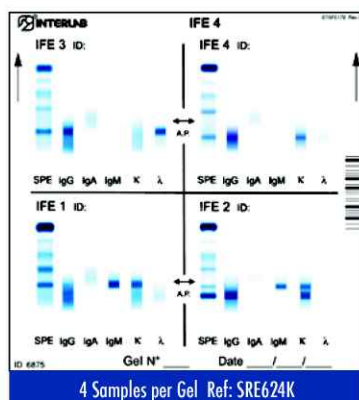
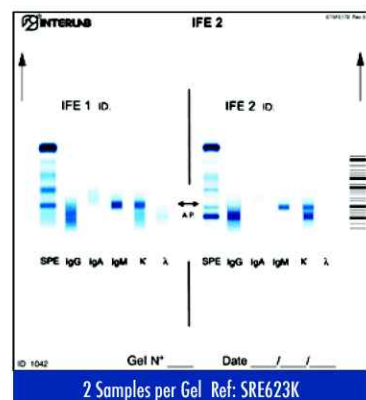
Reagents are ready to use, only the Stain and the Washing Solution for Immunofixation have to be reconstituted: Reconstitute Stain with 900 ml of distilled water; Dilute 20 ml of Washing Solution 1 for Immunofixation plus 20 ml of Washing Solution 2 for Immunofixation to a final volume of 1L with distilled water.

Sample Storage & Stability

Serum: 1 week at 2 to 8°C, and 1 month at -20°C
Urine: 1 week at 2 to 8°C, and 1 month at -20°C

Sample Preparation

Neat serum samples. Concentrated urines to a final total protein value of about 5 g/L



Serum & Concentrated Urine Pentavalent Immunofixation

The new Immunofixation electrophoresis (IFE) kits SRE629K and SRE630K are intended as a screening assay for monoclonal components in human serum and in concentrated urines. After the migration, serum proteins are immunofixed by a pentavalent antiserum anti-gamma, alpha, mu heavy chain and anti-Kappa and Lambda (free and bound) light chain. Thanks to the Interlab G26 and to the Easy Mask the Immunofixation procedure is extremely fast and user friendly and in just 43 minutes the first gel with 6 or 12 IFE results is completed.

Kit content

Gel Plates	10	Applicator Washing Solution	1
Blotting Paper A	30	Washing Sol. 1 for Immunofixation	1
Blotting Paper L	10	Washing Sol. 2 for Immunofixation	1
Blotting Paper G	10	Immunofixation Diluent	1
Buffered Sponges	20	Disposable Sample Plates	10
Acid Violet Stain	1		

Reagent Preparation

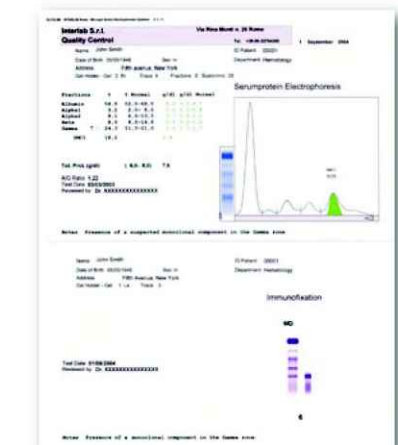
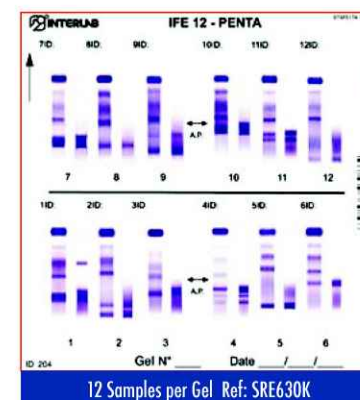
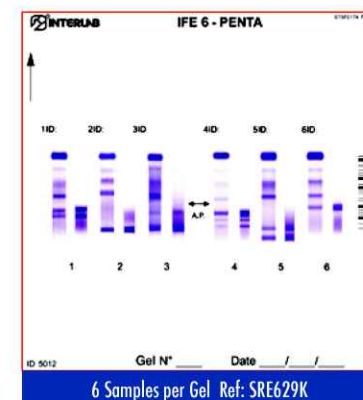
Reagents are ready to use, only the Stain and the Washing Solution for Immunofixation have to be reconstituted: Reconstitute Stain with 900 ml of distilled water; Dilute 20 ml of Washing Solution 1 for Immunofixation plus 20 ml of Washing Solution 2 for Immunofixation to a final volume of 1L with distilled water.

Sample Storage & Stability

Serum: 1 week at 2 to 8°C, and 1 month at -20°C
Urine: 1 week at 2 to 8°C, and 1 month at -20°C

Sample Preparation

Diluted serum sample: Reference lane diluted 1/3 - Pentavalent lane diluted 1/6. Concentrated urines to a final total protein value of about 5 g/L



Serum & Concentrated Urine Immunofixation Acid Violet Stain

The new Immunofixation Electrophoresis (IFE) kits SRE627K and SRE628K are intended to be used for qualitative immunological identification of monoclonal components in human serum and in concentrated urines. The use of high sensitivity staining solution (Acid Violet) and the new enhanced formulation guarantees speed and high sensitivity. Thanks to the Interlab G26 and to the Easy Mask the Immunofixation procedure is extremely fast and user friendly and in just 43 minutes the first gel with 2 or 4 IFE results is completed.

Kit content

Gel Plates	10	Applicator Washing Solution	1
Blotting Paper A	30	Washing Sol. 1 for Immunofixation	1
Blotting Paper L	10	Washing Sol. 2 for Immunofixation	1
Blotting Paper G	10	Immunofixation Diluent	1
Buffered Sponges	20	Disposable Sample Plates	10
Acid Violet Stain	1		

Reagent Preparation

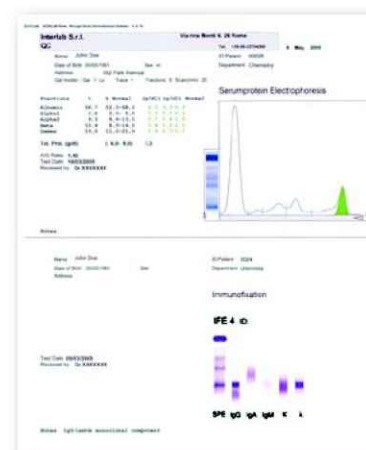
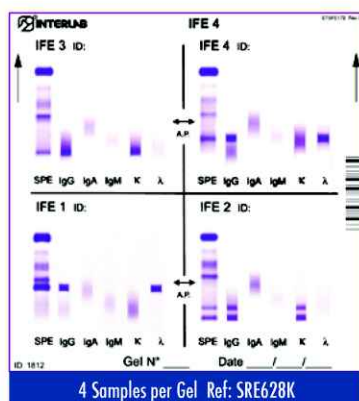
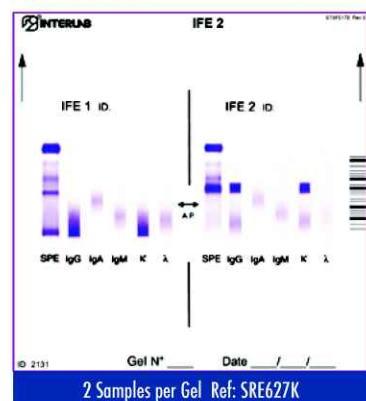
Reagents are ready to use, only the Stain and the Washing Solution for Immunofixation have to be reconstituted: Reconstitute Stain with 900 ml of distilled water; Dilute 20 ml of Washing Solution 1 for Immunofixation plus 20 ml of Washing Solution 2 for Immunofixation to a final volume of 1L with distilled water.

Sample Storage & Stability

Serum: 1 week at 2 to 8°C, and 1 month at -20°C
Urine: 1 week at 2 to 8°C, and 1 month at -20°C

Sample Preparation

Diluted serum sample: IgG lane dilute 1/6 - Other lanes dilute 1/3. Concentrated urines to a final total protein concentration of approx. 5 g/L



Bence-Jones Immunofixation

The new Immunofixation electrophoresis (IFE) kits SRE625K and SRE626K are intended to be used for qualitative immunological identification of Bence-Jones proteins and for detection of both normal and abnormal proteins in human neat urines. In fact IFE Bence Jones method combines the resolution of protein fractions by electrophoresis with the specific recognition of free light chains using antibodies raised against heavy chains of human immunoglobulins (IgG, IgM, and IgA) and their light chains, Kappa and Lambda, either bound or free. Thanks to the Interlab G26 and to the Easy Mask the Immunofixation procedure is extremely fast and user friendly and in just 45 minutes the first gel with 2 or 4 IFE B.J. results is completed.

Kit content

Gel Plates	10	Buffered Sponges	20	Washing Sol. 2 for Immunofixation	1
Blotting Paper A	30	Acid Violet Stain	1	Immunofixation Diluent	1
Blotting Paper L	10	Applicator Washing Solution	1	Disposable Sample Plates	10
Blotting Paper G	10	Washing Sol. 1 for Immunofixation	1		

Sample Storage & Stability

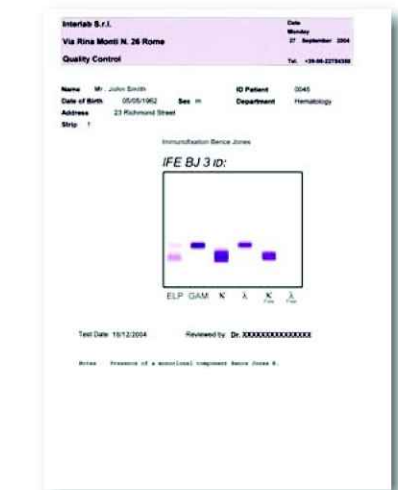
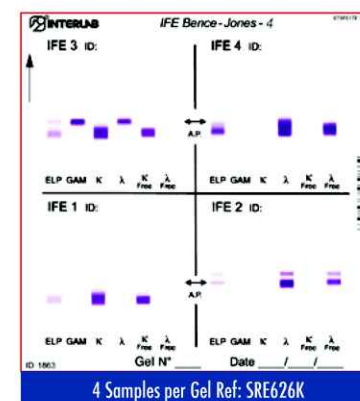
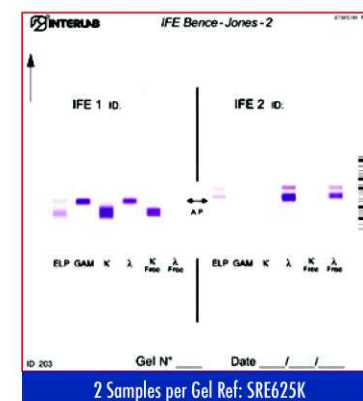
Urine: 1 week at 2 to 8°C, and 1 month at -20°C

Reagent Preparation

Reagents are ready to use, only the Stain and the Washing Solution for Immunofixation have to be reconstituted: Reconstitute Stain with 900 ml of distilled water; Dilute 20 ml of Washing Solution 1 for Immunofixation plus 20 ml of Washing Solution 2 for Immunofixation to a final volume of 1L with distilled water.

Sample Preparation

Unconcentrated urine.



Lipoproteins Electrophoresis Kit

The Lipoproteins Electrophoresis kits SRE606K and SRE621K are intended for the separation of lipoproteins in human serum by electrophoresis on agarose gel plates. Visual inspection of the pattern is performed to detect abnormalities, including variations of the bands or appearance of extra bands. Densitometry of the pattern allows the relative quantitation of lipoprotein zones. The kits have been designed for use with the fully automated instrument Interlab G26.

Kit content

Gel Plates	10	Sudan Black Stain	1
Blotting Paper	10	Applicator Washing Sol.	1
Buffered Sponges	20	Disposable Sample Plates	10

Reagent Preparation

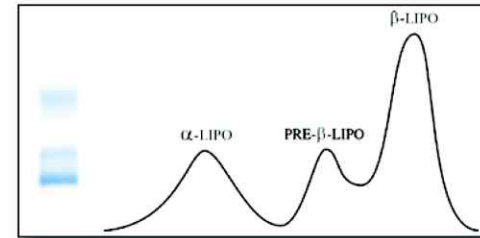
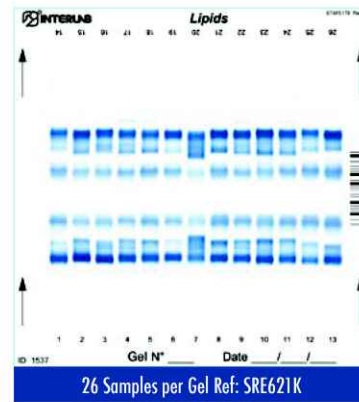
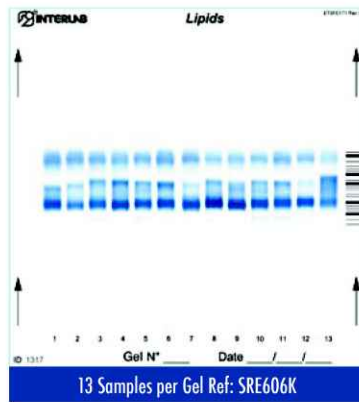
Reagents are ready to use, only the Stain has to be reconstituted by mixing 250ml of ethyl alcohol with 2.5 ml of Sudan Black plus 240 ml of distilled water and 10 ml of normal saline.

Sample Preparation

Fresh neat serum samples.

Sample Storage & Stability

Serum: 2 days at 2 to 8°C

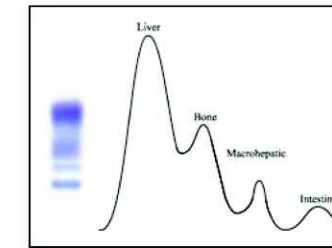
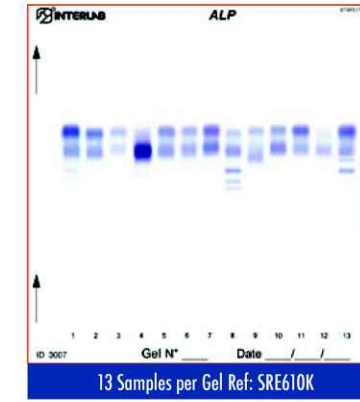


ALP Isoenzymes Electrophoresis Kit

The ALP electrophoresis kit SRE610K is intended to be used for the qualitative and quantitative identification of the Alkaline Phosphatase isoenzymes in human serum by agarose electrophoresis. Alkaline Phosphatase is an enzyme found in all tissues. Tissues with particularly high concentrations of ALP include the liver, bile ducts, placenta and bone. Damaged or diseased tissue releases enzymes into the blood, so serum ALP measurements can be abnormal in many conditions, including bone disease. To differentiate the location of damaged or diseased tissue in the body, ALP isoenzyme testing must be done. Thanks to the Interlab G26 and to the Easy Mask the CK procedure is extremely fast and user friendly.

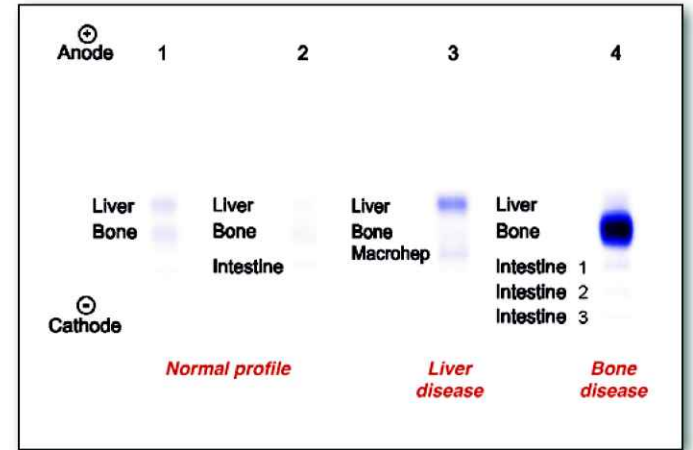
Kit content

Gel Plates	10	Substrat	2
Blotting Paper	20	NBT	10
Buffered Sponges	20	Neuraminidase	1
Applicator Washing Sol.	1	Disposable Sample Plates	10



Reagent Preparation

All reagents are ready to use, only the NBT must be reconstituted with 2 ml of Substrat.



Sample Storage & Stability

Serum: Fresh serum samples. If needed, 1 week at 2 to 8°C

Sample Preparation

Each sample must be pre-treated with the Neuraminidase. Distribute 5 µl of Neuraminidase in each wells then 25 µl of serum samples. Mix well, wait 5 minutes before starting the analysis.

LDH Isoenzymes Electrophoresis Kit

The LDH isoenzymes kit SRE612K is intended for the qualitative and quantitative determination of the LDH isoenzymes by electrophoresis on agarose gel and specific enzymatic detection. Lactate dehydrogenase (LDH) is present in all human tissues and cells, with the greatest concentrations in liver, heart, skeletal muscle and kidney. Normal serum LDH isoenzyme profiles are the result of normal tissue breakdown.

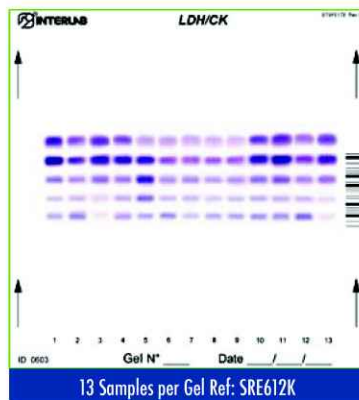
There are five different LDH isoenzymes that can be detected in serum. In standard LDH isoenzymes electrophoretic patterns five bands are observed, identified according to their electrophoretic mobilities from anode to cathode as LDH 1, LDH 2, LDH 3, LDH 4, and LDH 5. Thanks to the Interlab G26 and to the Easy Mask the LDH procedure is extremely fast and user friendly.

Kit content

Gel Plates	10
Blotting Paper	10
Buffered Sponges	20
Applicator Washing Sol.	1
Staining Reagent	10
Buffer	2
Disposable Sample Plates	10

Reagent Preparation

All reagents are ready to use, only the staining reagent must be reconstituted with 1.2 ml of buffer.

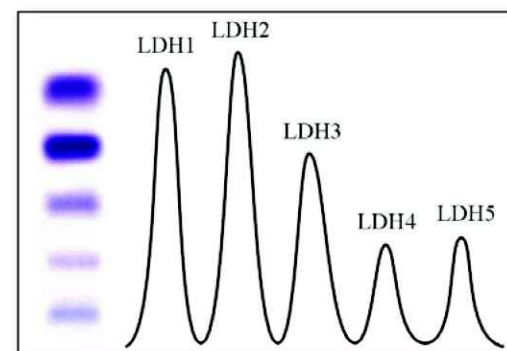


Sample Preparation

Neat serum samples

Sample Storage & Stability

Serum: Fresh serum samples. If needed, 2 days at 15 to 30°C or at 2 to 8°C



CK Isoenzymes Electrophoresis Kit

The CK Isoenzymes kit SRE611K is intended to be used for the qualitative and quantitative determination of the CK isoenzymes by electrophoresis on agarose gel and specific enzymatic revelations. The most important use of CK isoenzymes is in the diagnosis of myocardial damage, where CK-MB appears in the serum in about 4-6 hours after myocardial infarction, reaches peak activity at 18-24 hours and can disappear within 72 hours.

Thanks to the Interlab G26 and to the Easy Mask the CK procedure is extremely fast and user friendly.

Kit content

Gel Plates	10	Applicator Washing Solution	1
Blotting Paper	30	Substrate	10
Blotting Paper G	10	Diluent	2
Buffered Sponges	20	Disposable Sample Plates	10

Reagent Preparation

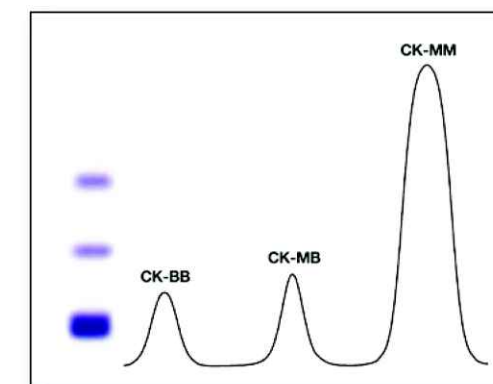
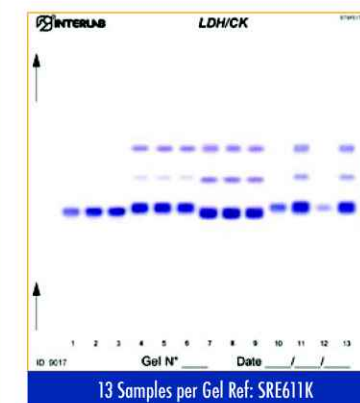
Reagents are ready to use, only the substrat reagent has to be reconstituted with 1.6 ml of diluent.

Sample Preparation

Neat serum samples

Sample Storage & Stability

Serum: Fresh serum samples. If needed: 2 days at 2 to 8°C, 2 weeks at -20°C.



CSF Isoelectric Focusing Kit

The Interlab CSF Isoelectric Focusing Kit SRE622K is intended for identifying oligoclonal banding in paired serum and CSF using isoelectric focusing and immunoblotting.

This technique is considered "The Gold Standard" method for the determination of intrathecal IgG synthesis in the clinical diagnosis of multiple sclerosis. In fact, isoelectric focusing is the most sensitive method for the detection of oligoclonal bands in serum and CSF (0.040mg/dl).

The procedure includes isoelectrofocusing on agarose gel using the Interlab G-26 instruments and manual immunoblotting steps. Isoelectrofocusing on agarose gel has the purpose to fractionate the proteins in the CSF and serum samples.

The immunoblotting steps have the purpose to transfer proteins on the transfer membrane.

This transfer membrane is processed to detect IgG oligoclonal bands and to demonstrate the difference, or lack of, in the distribution of IgG in the CSF and serum of the same patient.

The immunofixation with labeled anti-IgG antiserum permits to detect only the true IgG oligoclonal banding at increased sensitivity of detection so that the analysis can be generally performed on unconcentrated CSF.

The IgG immunofixation patterns of CSF and serum from the same patient are then visually compared.

This allows detection of oligoclonal banding that represents intrathecal synthesis of immunoglobulins. Five different patterns may be seen after the isoelectric focusing (see Fig. below):

Type 1: Normal CSF, no band present in the CSF.

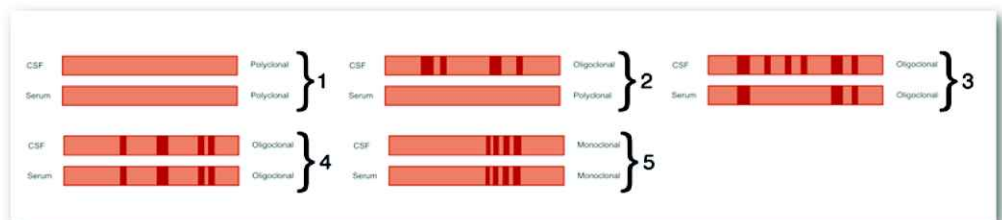
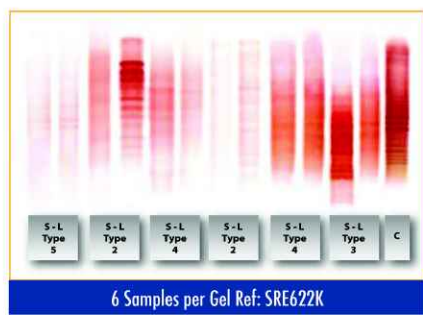
Type 2: Intrathecal IgG synthesis. CSF with restricted oligoclonal bands not seen in the serum, found in multiple sclerosis.

Type 3: Intrathecal IgG synthesis: CSF with restricted oligoclonal bands with additional bands seen in both the CSF and serum. It is found in multiple sclerosis and brain inflammation in systemic disease, for example, sarcoidosis.

Type 4: Identical oligoclonal bands in the CSF and serum. Monoclonal bands found in systemic inflammation, for example, Guillain-Barré syndrome.

Type 5: Monoclonal bands in both the CSF and serum. It is found in myeloma or monoclonal gammopathy of uncertain significance.

Kit content		Reagent Preparation	Sample Preparation	Sample Storage & Stability
Gel Plates	10	Reagents are ready to use.	Neat CSF samples. The concentration of IgG in the paired serum samples should be adjusted to the same level of the CSF samples using distilled water.	Serum/CSF: Fresh serum and CSF samples. If needed: 1 week at 2 to 8°C, 1 month at -20°C.
Contact Strips	20			
Blotting Membranes	20			
Concentrated Acetate Buffer	1			
Binding Agent	2			
Anodic Solution	1			
Cathodic Solution	1	Blotting Paper	10	
		Blotting Paper F	20	
		Blotting paper G	10	
		First Antibody	1	
		Second Antibody	1	
		Chromogen	10	



Type 1: Normal pattern

Type 2: Intrathecal Ig G synthesis (ex: Multiple Sclerosis)

Type 3: Intrathecal Ig G synthesis in systemic disease

Type 4: Systemic inflammation (mirror pattern with oligoclonal pattern)

Type 5: Monoclonal gammopathy (mirror pattern with monoclonal bands)

YEREL TEMSİLCİ



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