

SHD

SCIENCE HEALTH DIAGNOSTICS

QUALITY CONTROL



Deniz
Biyokimya

About Us

At the forefront of Quality Control solutions in IVD diagnostics

Deniz Biyokimya Ürünleri Dış Tic. A.Ş. launched its advanced R&D operations in January 2024 at DEPARK—Dokuz Eylül University Technopark—focusing primarily on the development and production of high-performance Quality Control (QC) materials for clinical laboratories.

With direct collaboration between our innovation team and the Central Laboratories of the Faculty of Medicine and academic experts in biochemistry, we are creating next-generation QC solutions that meet the evolving demands of modern diagnostics.

To strengthen our global presence and accelerate technology transfer, we also established Bykaralar Ltd., enabling streamlined integration of the latest advancements in IVD systems and automation.

- Deniz Biyokimya specializes in the export and distribution of clinical laboratory products—including FIA, CLIA, and QC kits—with an emphasis on scientific rigor and manufacturing excellence.
- Currently serving public and private institutions across Türkiye, we now export to 12 countries using a fully integrated ERP and CRM infrastructure.
- Our mission is to deliver validated, reliable, and accessible QC solutions that support laboratories worldwide in achieving consistent and accurate results.



Our production facility in İzmir's Sarnıç district is primarily focused on the manufacturing of high-quality FIA, CLIA, and QC solutions. Designed to meet international standards, the site also supports the production of rapid tests such as pregnancy, drug screening, and glucose strips under the SHD brand.



Why Choose Our QC Solutions?

True Human Serum

All QC products are formulated with authentic human serum for superior accuracy and matrix compatibility.

Comprehensive Panels

Each vial contains multiple parameters—enabling simultaneous monitoring of hormones, tumor markers, cardiac markers, thyroid functions, and more.

Customizable Levels

Level I, II, and III QC available for CLIA and FIA systems.

Stability & Performance

Long shelf life and consistent performance—designed to meet global accreditation standards.

SHD

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INTERNAL QUALITY CONTROL PROGRAMS

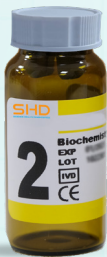
- Biochemistry Control
- Protein / Immunology Control
- Therapeutic Drug Monitoring Control
- Coagulation Control
- DDIM Control
- Immunoassay Control
- Vitamin D Control
- Parathormone Control
- Specific Immunoassay Control
- Procalcitonin Control
- Hypertension Markers Control
- Diabetes Control
- Immunosuppressant Control
- Thalassemia Control
- Cardiac Markers / STAT Control
- Prenatal Screening Control

Biochemistry Control

- Provides a comprehensive range of clinical chemistry analytes for integrated and modular platforms.
- Lyophilized control available in two levels
- Human serum based
- 3-year shelf life at 2–8°C
- 5-day reconstituted stability at 2–8°C for most analytes
- 30-day reconstituted stability at -20°C to -70°C

Ordering Information

Cat#	Description
101	Level 1 12x3 ml



Analytes

Potassium,	LDH,	Phosphorus,
Sodium,	CK,	Uric Acid,
Chloride,	Total	Amylase,
Lithium,	Cholesterol,	Magnesium,
Total Protein,	Iron,	Direct Bilirubin,
HDL-Cholesterol,	Unsaturated Iron	Lipase,
LDL-Cholesterol,	Binding	Glucose,
Total Bilirubin,	Capacity (UIBC),	Albumin,
ALP,	AST (SGOT)	Urea,
Triglyceride,	ALT (SGPT)	GGT,
		Calcium,
		Creatinine

Ordering Information

Cat#	Description
102	Level 2 12x3 ml



Protein / Immunology Control

- Contains many serum proteins and related analytes
- Lyophilized, human serum based
- 3-year shelf life at 2–8°C
- 5-day reconstituted stability at 2–8°C
- 30-day reconstituted stability at -20°C to -70°C

Ordering Information

Cat#	Description
151	Level 1 12x1 ml



Analytes

α -1-Acid Glycoprotein,	CRP,
α -1-Antitrypsin,	Haptoglobin,
α -2-Macroglobulin,	Immunoglobulin A (IgA)
α -2-Microglobulin,	Immunoglobulin E (IgE),
Albumin,	Immunoglobulin G (IgG),
Antistreptolysin O (ASO),	Immunoglobulin M (IgM)
Ceruloplasmin,	Kappa Light Chain,
Complement C1q,	Lambda Light Chain
Complement C3,	Prealbumin
Complement C4,	Retinol Binding Protein (RBP)
Transferrin	Rheumatoid Factor

Ordering Information

Cat#	Description
152	Level 2 12x1 ml



Therapeutic Drug Monitoring Control

- ▶ Lyophilized
- ▶ For labs that run a high volume of serum therapeutic drug tests or prefer dedicated TDM controls
- ▶ Human serum-based control
- ▶ 3-year shelf life at 2–8°C
- ▶ 30-day reconstituted stability at 2–8°C
- ▶ 90-day reconstituted stability at -20°C to -70°C

Analytes

Digoxin,
Phenytoin,
Phenobarbital,
Carbamazepine,
Lithium,
Theophylline,
Valproic Acid,
Vancomycin,
Gentamicin,
Salicylate

Ordering Information

Cat#	Description
171	Level 1 12x1 ml



Ordering Information

Cat#	Description
172	Level 2 12x1 ml



Coagulation Control

- ▶ Extended open-vial stability reduces the cost of daily QC
- ▶ Lyophilized control available in two levels
- ▶ Three-year shelf life allows laboratories to save money by performing fewer crossover studies
- ▶ Human based
- ▶ 3-year shelf life at 2–8°C
- ▶ 3-day reconstituted stability at 2–8°C for most analytes
- ▶ 30-day reconstituted stability at -20°C to -70°C

Analytes

Activated Partial Thromboplastin Time (aPTT),
Prothrombin Time (PT),
Fibrinogen

Ordering Information

Cat#	Description
351	Level 1 12x1 ml



Ordering Information

Cat#	Description
352	Level 2 12x1 ml



DDIM Control

- ▶ Extended open-vial stability reduces the cost of daily QC
- ▶ Lyophilized control available in two levels
- ▶ Human based
- ▶ 3-year shelf life at 2-8°C
- ▶ 3-day reconstituted stability at 2-8°C
- ▶ 30-day reconstituted stability at -20°C to -70°C

Ordering Information

Cat#	Description
361	Level 1 12x1 ml



Analytes

D-Dimer

Ordering Information

Cat#	Description
362	Level 2 12x1 ml



Immunoassay Control

- ▶ Includes most common analytes with increasing clinical utilization
- ▶ Lyophilized control available in two levels
- ▶ Human serum based
- ▶ 3-year shelf life at 2-8°C
- ▶ 7-day reconstituted stability at 2-8°C for most analytes
- ▶ 30-day reconstituted stability at -20°C to -70°C

Ordering Information

Cat#	Description
401	Level 1 12x5 ml



Analytes

Anti-TG,	Progesterone Prolactin,
Anti-TPO,	TSH,
Ferritin,	Total Testosterone,
Folic Acid,	Vitamin B12,
FSH,	25-Hydroxy Vitamin D3,
Free T3,	Insulin,
Free T4,	17-OH progesterone Cortisol,
hCG-β Subunit (Free),	Growth Hormone
Estradiol,	
LH,	

Ordering Information

Cat#	Description
402	Level 2 12x5 ml



Vitamin D Control

- ▶ Lyophilized
- ▶ Human serum-based control
- ▶ 3-year shelf life at 2–8°C
- ▶ 3-day reconstituted stability at 2–8°C
- ▶ 30-day reconstituted stability at -20°C to -70°C

Ordering Information

Cat#	Description
411	Level 1 12x1 ml



Analytes

25-Hydroxy Vitamin D3

Ordering Information

Cat#	Description
412	Level 2 12x1 ml



Parathormone Control

- ▶ Two levels PTH concentrations
- ▶ Provides a highly efficient solution for laboratories that focus on routine tests
- ▶ Lyophilized, human serum based
- ▶ 3-year shelf life at -20°C to -70°C
- ▶ 2-year shelf life at -15°C to -20°C
- ▶ 8-hour reconstituted stability at 2–8°C
- ▶ 30-day reconstituted stability at -20°C to -70°C

Ordering Information

Cat#	Description
421	Level 1 12x1 ml



Analytes

PTH (Intact)

Ordering Information

Cat#	Description
422	Level 2 12x1 ml



Specific Immunoassay Control

- Offers a vast array of specific routine immunoassay analytes
- Provides a highly efficient solution for laboratories that focus on routine tests
- Lyophilized, human serum based
- 3-year shelf life at 2-8°C
- 5-day reconstituted stability at 2-8°C
- 30-day reconstituted stability at -20°C to -70°C

Ordering Information

Cat#	Description
451	Level 1 12x3 ml



Analytes

AFP,
CEA,
CA-125,
CA-15-3,
CA-19-9,
CA-72-4,
Total PSA,
Free PSA

Ordering Information

Cat#	Description
452	Level 2 12x3 ml



Procalcitonin Control

- Lyophilized control available in two levels
- Human serum based
- 3-year shelf life at 2-8°C
- 3-day reconstituted stability at 2-8°C
- 30-day reconstituted stability at -20°C to -70°C

Ordering Information

Cat#	Description
471	Level 1 12x1 ml

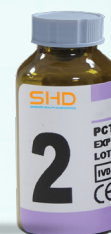


Analytes

Procalcitonin

Ordering Information

Cat#	Description
472	Level 2 12x1 ml



Hypertension Markers Control

- Provides relevant values in monitoring precision for analytes specific to pituitary-adrenal axis disorders
- Lyophilized human serum based
- 3-year shelf life at -20°C to -70°C
- 2-year shelf life at -15°C to -20°C
- 8-hour reconstituted stability at 2-8°C

Analytes

ACTH,
ADH,
Aldosterone,
Cortisol,
Renin

Ordering Information

Cat#	Description
481	Level 1 12x1 ml



Ordering Information

Cat#	Description
482	Level 2 12x1 ml



Diabetes Control

- Designed to monitor the assay precision of Haemoglobin A1c associated with diabetes
- Lyophilized control available in two levels
- Human whole blood-based control
- 3-year shelf life at 2-8°C
- 7-day reconstituted stability at 2-8°C
- 30-day reconstituted stability at -20°C to -70°C

Analytes

Hemoglobin A1c

Ordering Information

Cat#	Description
501	Level 1 12x1 ml



Ordering Information

Cat#	Description
502	Level 2 12x1 ml



Immunosuppressant Control

- ▶ Two levels ranging from low to high immunosuppressant concentrations
- ▶ Compatible with chromatography and most immunoassay methods.
- ▶ Lyophilized, human blood based
- ▶ 3-year shelf life at 2-8°C
- ▶ 14-day reconstituted stability at 2-8°C
- ▶ 30-day reconstituted stability at -20°C to -70°C

Analytes

Cyclosporine,
Everolimus,
Sirolimus,
Tacrolimus

Ordering Information

Cat#	Description
531	Level 1 12x1 ml



Ordering Information

Cat#	Description
532	Level 2 12x1 ml



Thalassemia Control

- ▶ Lyophilized
- ▶ Human whole blood-based control
- ▶ 2-year shelf life at 2-8°C
- ▶ 7-day reconstituted stability at 2-8°C
- ▶ 30-day reconstituted stability at -20°C to -70°C

Analytes

Hemoglobin A2,
Hemoglobin F

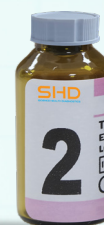
Ordering Information

Cat#	Description
541	Level 1 12x1 ml



Ordering Information

Cat#	Description
542	Level 2 12x1 ml



Cardiac Markers / STAT Control

- Designed to monitor precision of cardiac marker assays
- Lyophilized human serum based
- 3-year shelf life at 2–8°C
- 3-day reconstituted stability at 2–8°C for most analytes
- 30-day reconstituted stability at -20°C to -70°C

Analytes

Troponin I,
Troponin T,
High Sensitive Troponin I,
High Sensitive Troponin T,
CK-MB (mass),
Myoglobin,
BNP,
NT-proBNP

Ordering Information

Cat#	Description
701	Level 1 12x3 ml



Ordering Information

Cat#	Description
702	Level 2 12x3 ml



Prenatal Screening Control

- Designed to monitor the precision of immunoassay test methods used during maternal serum first trimester screening
- Includes clinically relevant levels of Free beta hCG and PAPP-A
- Lyophilized, human serum based
- 3-year shelf life at 2–8°C
- 15-day reconstituted stability at 2–8°C
- 90-day reconstituted stability at -20°C to -70°C

Analytes

AFP,
Inhibin-A,
PAPP-A,
hCG,
Free Estradiol,
hCG-β Subunit (Free)

Ordering Information

Cat#	Description
901	Level 1 12x1 ml



Ordering Information

Cat#	Description
902	Level 2 12x1 ml

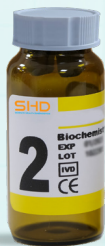


Chemistry Plus Level 1 Control

- Provides a comprehensive range of clinical chemistry analytes for integrated and modular platforms.
- Lyophilized control available in two levels
- Human serum based
- 3-year shelf life at 2-8°C
- 5-day reconstituted stability at 2-8°C for most analytes
- 30-day reconstituted stability at -20°C to -70°C

Ordering Information

Cat#	Description
101	Level 1 12x3 ml



Ordering Information

Cat#	Description
102	Level 2 12x3 ml



Analytes

CK (Total)	Acid Phosphatase (Total)	Phosphate (Inorganic)
Digoxin	Albumin	Potassium
Gentamicin	Alkaline Phosphatase (ALP)	Sodium
Lithium	ALT (GPT)	Urea
Paracetamol	Amylase	Uric Acid (Urate)
Salicylate	Amylase (Pancreatic)	Copper
Theophylline	AST (GOT)	Zinc
Tobramycin	Bicarbonate	Myoglobin
Cortisol	Bile Acids	Troponin I
Folate	Bilirubin (Direct)	Carbamazepine
PSA (Total)	Bilirubin (Total)	Phenobarbitone
T3 (Total)	Calcium	Phenytion
T4 (Free)	Chloride	Valproic Acid
T4 (Total)	Cholinesterase	Vancomycin
TSH	Creatinine	Alpha-Fetoprotein (AFP)
Vitamin B12	D-3-Hydroxybutyrate	CEA
Apolipoprotein A-I	gGT	hCG
Apolipoprotein B	GLDH	Prolactin
Cholesterol (HDL)	Glucose	T3 (Free)
Cholesterol (Total)	Iron	a-1-Acid Glycoprotein
NEFA	Iron (TIBC)	a-1-Antitrypsin
Triglycerides	Lactate	Ceruloplasmin
Immunoglobulin A (IgA)	Lactate Dehydrogenase (LDH)	Complement C3
Immunoglobulin G (IgG)	Lipase	Complement C4
Immunoglobulin M (IgM)	Magnesium	CRP
Protein (Total)	Osmolality	Ferritin
Transferrin		Haptoglobin
a-HBDH		Immunoglobulin E (IgE)
		Prealbumin

Chemistry Plus Level 2 Control

- Contains many serum proteins and related analytes
- Lyophilized, human serum based
- 3-year shelf life at 2-8°C
- 5-day reconstituted stability at 2-8°C
- 30-day reconstituted stability at -20°C to -70°C

Ordering Information

Cat#	Description
151	Level 1 12x1 ml



Ordering Information

Cat#	Description
152	Level 2 12x1 ml



Analytes

CK (Total)	Acid Phosphatase (Total)	Phosphate (Inorganic)
Digoxin	Albumin	Potassium
Gentamicin	Alkaline Phosphatase (ALP)	Sodium
Lithium	ALT (GPT)	Urea
Paracetamol	Amylase	Uric Acid (Urate)
Salicylate	Amylase (Pancreatic)	Copper
Theophylline	AST (GOT)	Zinc
Tobramycin	Bicarbonate	a-1-Globulin
Cortisol	Bile Acids	a-2-Globulin
Folate	Bilirubin (Direct)	b-Globulin
PSA (Total)	Bilirubin (Total)	g-Globulin
T3 (Total)	Calcium	
T4 (Free)	Chloride	
T4 (Total)	Cholinesterase	
TSH	Creatinine	
Vitamin B12	D-3-Hydroxybutyrate	
Apolipoprotein A-I	gGT	
Apolipoprotein B	GLDH	
Cholesterol (HDL)	Glucose	
Cholesterol (Total)	Iron	
NEFA	Iron (TIBC)	
Triglycerides	Lactate	
Immunoglobulin A (IgA)	Lactate Dehydrogenase (LDH)	
Immunoglobulin G (IgG)	Lipase	
Immunoglobulin M (IgM)	Magnesium	
Protein (Total)	Osmolality	
Transferrin		
a-HBDH		



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