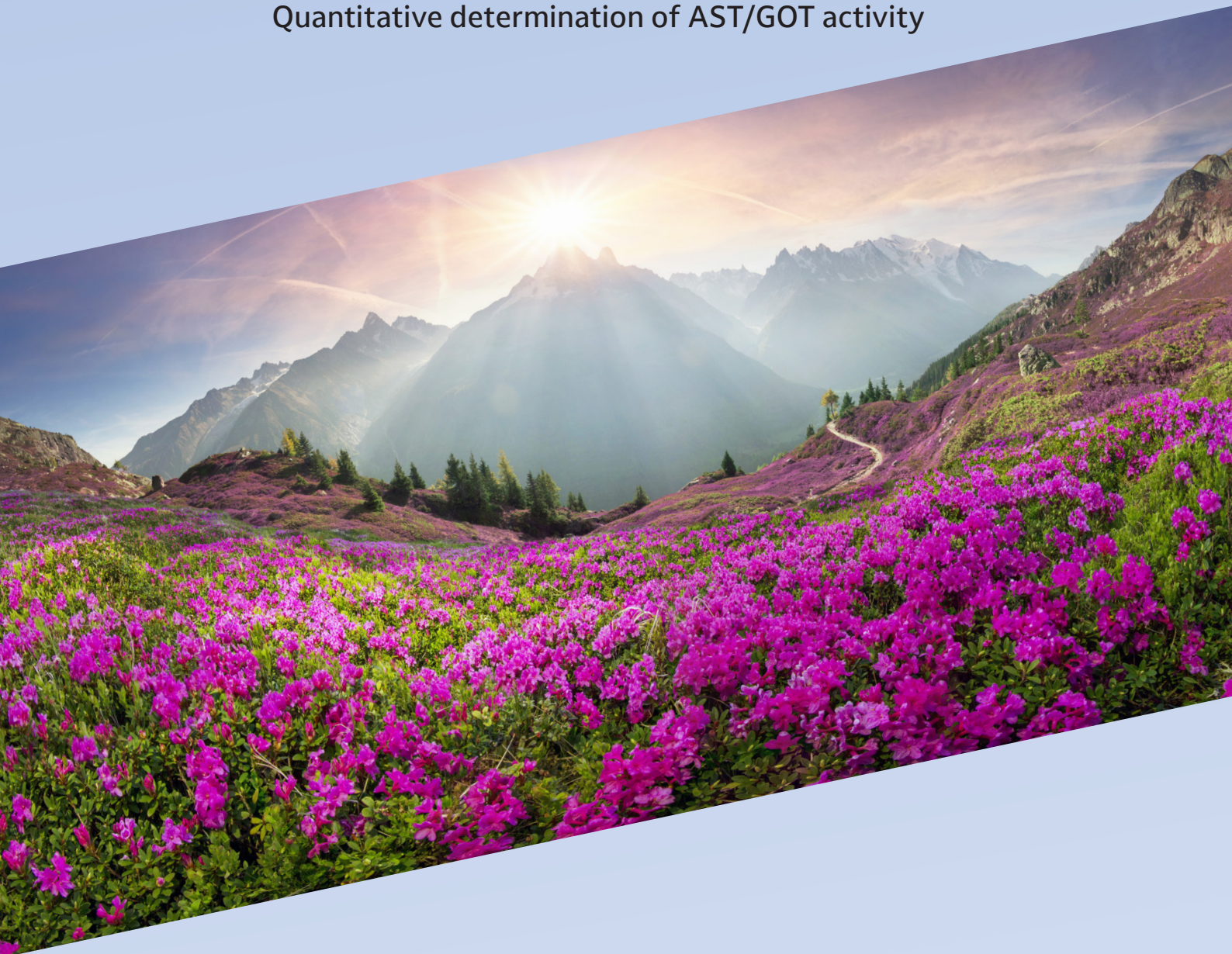


ASPARTATE AMINOTRANSFERASE (AST/GOT)

Quantitative determination of AST/GOT activity



Featured products:

- Malate Dehydrogenase [MAD-211](#)
- NADH (β -Nicotinamide-adenine dinucleotide, reduced disodium salt) [BNH-208A](#)
- α -Ketoglutaric acid disodium salt, dihydrate [AKE-05C](#)

ASPARTATE AMINOTRANSFERASE (AST/GOT)

FEATURED PRODUCTS

Principle

L-Aspartate + α -Ketoglutarate $\xrightarrow{\text{AST}}$ Glutamate + Oxalacetate

Oxalacetate + NADH + H⁺ $\xrightarrow{\text{MDH}}$ Malate + NAD⁺

Malate Dehydrogenase

Ref: [MAD-211](#)

Michaelis constant	5.4×10 ⁻⁵ M (L-Malate), 5.0×10 ⁻⁶ M (Oxaloacetate) 8.1×10 ⁻⁶ M (NADH)
Stability	Stable at - 20°C for at least 12 months
Optimum pH	8.0
Optimum temperature	70°C
pH Stability	pH 3.0 - 9.0 (25°C, 20hr)
Thermal stability	Below 70°C (pH 7.5, 15min)

NADH (β -Nicotinamide-adenine dinucleotide, reduced disodium salt)

Ref: [BNH-208A](#)

Stability	At least 12 months at 2-8°C
pH	7 - 10
Storage	2 - 8°C. Protect from moisture and light
A _{340/280}	0.42 - 0.44

α -Ketoglutaric acid disodium salt, dihydrate

Ref: [AKE-05C](#)

Stability	At least 2 years at room temperature
Assay	> 98 %
Storage	Room temperature
Transmittance	> 85 % (10%, H ₂ O)

ASPARTATE AMINOTRANSFERASE (AST/GOT) SORACHIM REAGENT RESULTS

Reagents

R 1	TRIS pH 7,8
Buffer	Lactate dehydrogenase (LDH)
	Malate dehydrogenase (MDH)
	L-Aspartate
R 2	NADH
Substrate	α -Ketoglutarate

Linearity limit: 467 U/L

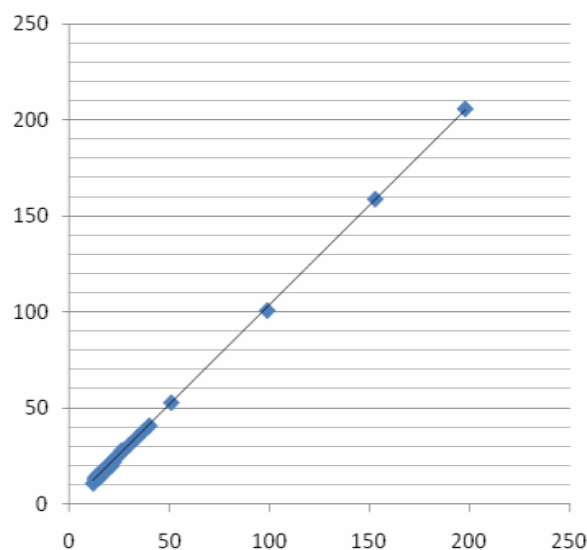
Measuring range: From detection limit of 0 U/L to linearity limit of 467 U/L.

	Intra-assay (n=20)		Inter-assay (n=20)	
Mean (U/L)	48	159	47	156
SD	0,56	0,57	1,42	4,35
CV (%)	1,16	0,36	3,00	2,79

Accuracy

Correlation coefficient (r^2): 0,99956.

Regression equation: $y = 1,042x - 0,342$.



STABILITY DATA

Normal Control Serum (NC): Target value 49 U/L, Range 40 – 57 U/L

Pathological Control Serum (PC): Target value 163 U/L, Range 134 – 192 U/L

Reagent stability at 37°C

RESULTS DAY 0 (U/L)	NC: 48 PC: 155	NC: 47 PC: 154	NC: 43 PC: 153
RESULTS DAY 14 (U/L)	NC: 49 PC: 160	NC: 50 PC: 160	NC: 49 PC: 160
RESULTS DAY 30 (U/L)	NC: 49 PC: 159	NC: 50 PC: 160	NC: 49 PC: 159

Working reagent stability at 2-8°C

DAY 0 (U/L)	NC: 47 PC: 145	NC: 48 PC: 142	NC: 47 PC: 145
DAY 14 (U/L)	NC: 47 PC: 150	NC: 47 PC: 148	NC: 50 PC: 156
DAY 21 (U/L)	NC: 48 PC: 150	NC: 47 PC: 149	NC: 49 PC: 144

Working reagent stability at room temperature

DAY 0 (U/L)	NC: 45 PC: 144	NC: 47 PC: 143	NC: 48 PC: 144
DAY 3 (U/L)	NC: 49 PC: 140	NC: 49 PC: 143	NC: 47 PC: 150

Stable for 18 months

ADDITIONAL PRODUCTS



→ L-Aspartate [LAP-41C](#)

L-Aspartic acid

$C_4H_7NO_4$ Mw : 133.10

White powder - Purity : > 99 %

→ TRIS Base (Tris(hydroxymethyl)-aminomethane) [TRI-187C](#)

TRIS base - Tris(hydroxymethyl)-aminomethane

$C_4H_{11}NO_3$ - Mw : 121.14

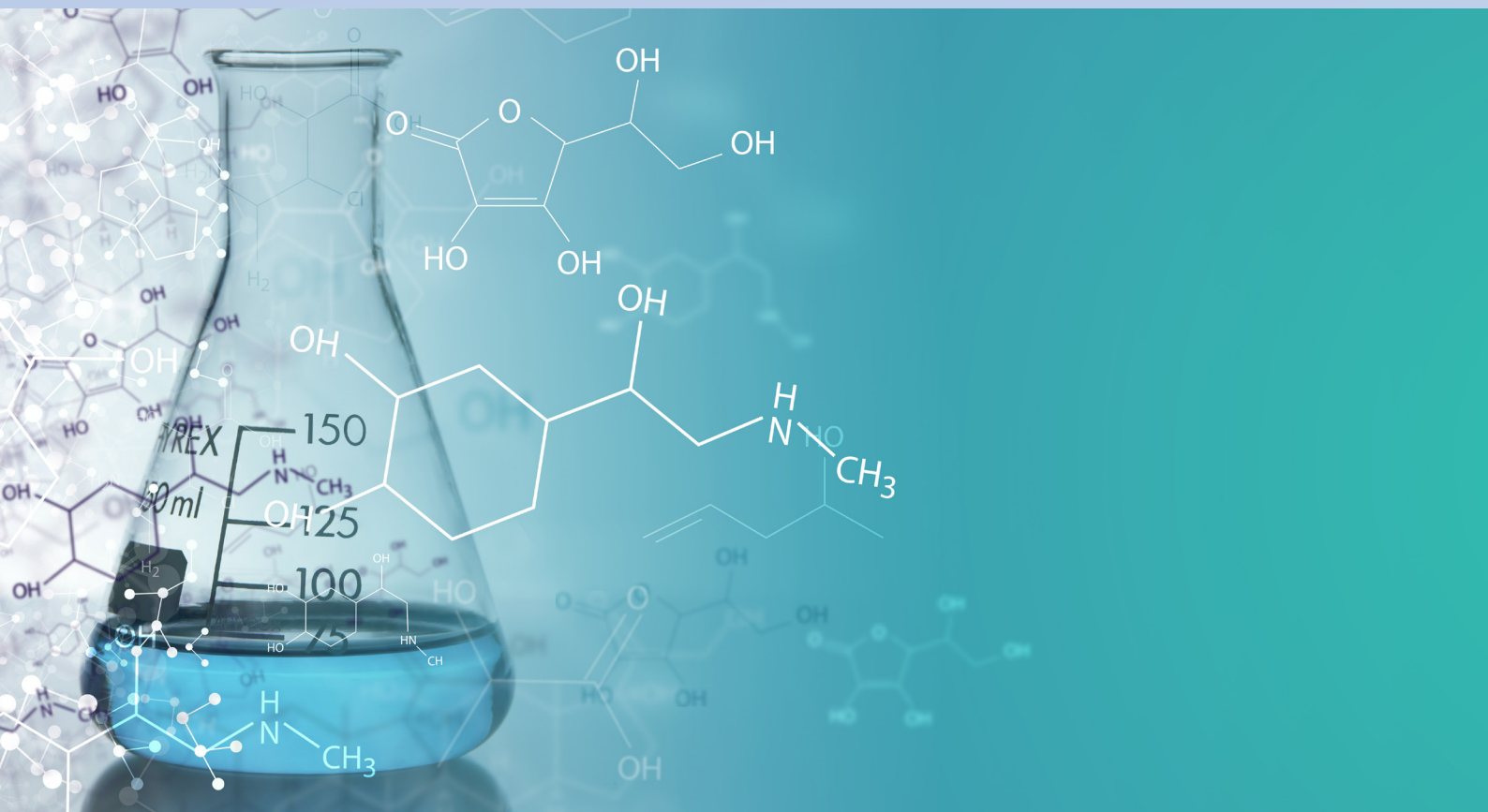
White powder - Purity : > 99 %

→ Bovine Serum Albumin [ALB-30C](#)

Bovine Serum Albumin Fraction V

Purity : > 98 % - Mw : 66 kDa

Greyish flakes



Your partner for Diagnostic Reagents



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