



BMA BIOMEDICALS



Peninsula Laboratories

S-1513

Thymosin β -4 (human, bovine, horse, rat) ELISA [UniProt: P62328, P62326, P62327, P62329]

Thymosins are small proteins isolated from the thymus, but most are now known to be also present in many other tissues. Thymosins have diverse biological activities, and two in particular, thymosins α 1 and β 4, have potentially important uses in medicine. Thymosin α -1 is a 28-amino acids peptide fragment derived from prothymosin alpha, a protein that in humans is encoded by the PTMA gene and it is believed to be a major component of Thymosin Fraction 5 responsible for the activity of that preparation in restoring immune function in animals lacking thymus glands. Thymosin β -4 is a 43-amino acids protein that in humans is encoded by the TMSB4X gene. It is a major cellular constituent in many tissues. Its intracellular concentration may reach as high as 0.5 mM. Following Thymosin α 1, β 4 was the second of the biologically active peptides from Thymosin Fraction 5 to be completely sequenced and synthesized.

This ELISA was developed with serum from rabbits immunized with Thymosin β -4 coupled to a carrier protein.

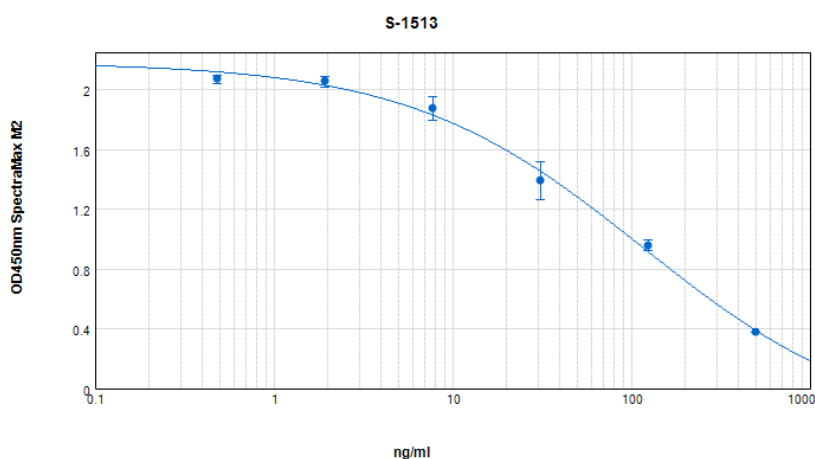
TECHNICAL AND ANALYTICAL CHARACTERISTICS

Lot number:	A17278
Host species:	Rabbit IgG
Quantity:	96 tests
Format:	Extraction-free kit for human serum or plasma (EIAS type).
Shelf-life:	One year from production date. Store refrigerated at 4° - 8°C.
Applications:	This ELISA has been validated with the included reagents. It is intended to be used with samples of human origin (original protocol IV, (Std. AbON.Bt). For research use only. Please see www.bma.ch for protocols and general information.
Range:	0-500ng/ml
Average IC50:	80ng/ml
Immunogen:	Synthetic peptide Ac-Ser-Asp-Lys-Pro-Asp-Met-Ala-Glu-Ile-Glu-Lys-Phe-Asp-Lys-Ser-Lys-Leu-Lys-Lys-Thr-Glu-Thr-Gln-Glu-Lys-Asn-Pro-Leu-Pro-Ser-Lys-Glu-Thr-Ile-Glu-Gln-Glu-Lys-Gln-Ala-Gly-Glu-Ser-OH coupled to a carrier protein.

Cross-Reactivity:

PEPTIDE:	%:
Thymosin β -4 (human, bovine, horse, rat)	100
Thymosin β -10	0
Thymosin β -1	0

Typical titration curve of Thymosin β -4 in a competitive ELISA with this antibody:



Suggested Preparation of Standards		
	ng/ml	Range: 0.49 to 500ng/ml
Stock	1000	
S1	500.00	Add 250 μ l Stock + 250 μ l diluent
S2	125.00	Add 200 μ l S1 + 600 μ l diluent
S3	31.25	Add 200 μ l S2 + 600 μ l diluent
S4	7.81	Add 200 μ l S3 + 600 μ l diluent
S5	1.95	Add 200 μ l S4 + 600 μ l diluent
S6	0.49	Add 200 μ l S5 + 600 μ l diluent
S0	0.00	500 μ l diluent

Related Products:

T-4848: Rabbit antiThymosin β 4, neat antiserum
T-4847: Rabbit antiThymosin β 4, purified IgG
T-4856: Rabbit antiThymosin α 1, purified IgG
S-1298: ELISA, high sensitivity for extracted samples

This product contains Thimerosal as a preservative and is intended for laboratory use and research purposes only. Purchase of this product does not include authorization to use it in diagnostic or therapeutic applications.

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EIAS

1.3.2021