



BMA BIOMEDICALS



Peninsula Laboratories

S-1337

Hepcidin-25 (human) ELISA [UniProt: P81172]

Hepcidin-25 is a 25-residue peptide synthesized in the liver. This is the bioactive form of hepcidin, a key regulator of iron homeostasis. It acts through downregulation of the cellular iron exporter ferroportin, which is expressed on enterocytes, macrophages and hepatocytes. Hepcidin-25 production is upregulated by inflammation as well as iron overload, leading to anemia through interference with the body's intestinal iron absorption and its utilization of iron. Hepcidin is also a small defensin-like peptide with antimicrobial activity, which is secreted into the urine.

This ELISA was developed with serum from rabbits immunized with Hepcidin-25 coupled to a carrier protein.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

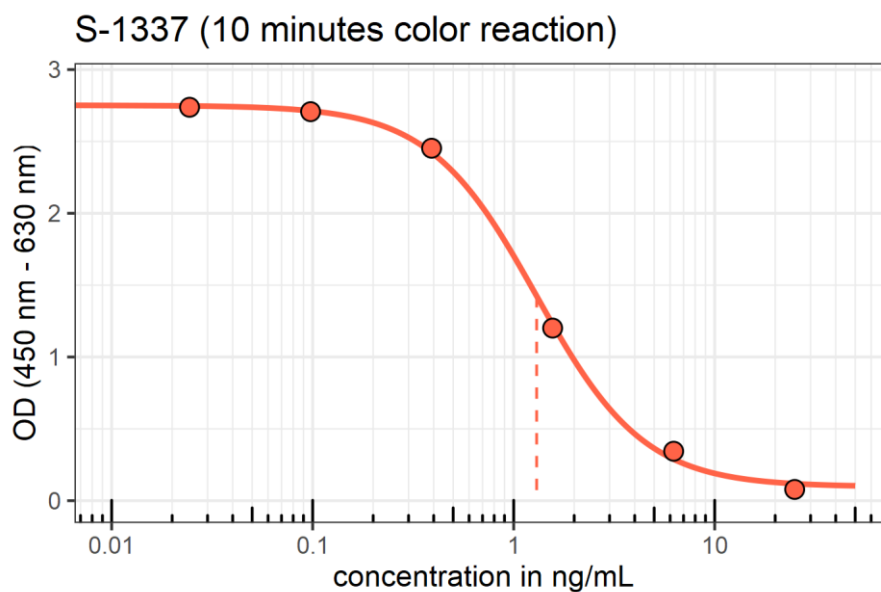
Lot number:	A20PO22087
Host species:	Rabbit IgG
Quantity:	96 tests
Format:	Extraction-free kit for human serum or plasma (EIAS type).
Shelf-life:	One year from production date. Store refrigerated at 4° - 8°C.
Applications:	This ELISA has been validated with the included reagents. It is intended to be used with samples of human origin (original protocol V, Ab1hr.Std2hr.BtON). For research use only. Please see www.bma.ch for protocols and general information.
Range:	0 - 25ng/ml
Average IC₅₀:	1.3ng/ml
Immunogen:	Synthetic peptide H-Asp-Thr-His-Phe-Pro-Ile-Cys-Ile-Phe-Cys-Cys-Gly-Cys-Cys-His-Arg-Ser-Lys-Cys-Gly-Met-Cys-Cys-Lys-Thr-OH, (Disulfide bonds between Cys7 and Cys23/Cys10 and Cys22/Cys11 and Cys19/Cys13 and Cys14) coupled to carrier protein.

Cross-Reactivity:

PEPTIDE	%
Hepcidin-25 (human)	100
Hepcidin-25 (rat)	0
Hepcidin-25 (mouse)	0
Angiotensin I (human)	0
Insulin (human)	0
Glucagon (1-29) (human, bovine, porcine, rat, mouse, hamster)	0

Some cross-reactivity data is taken from Radioimmunoassay applications.

Typical titration curve of Hepcidin-25 in a competitive ELISA with this antibody:



Suggested Preparation of Standards		
	ng/ml	Range: 0.02 to 25ng/ml
Stock	1000	
S1	25.00	Add 25µl Stock + 975µl diluent
S2	6.25	Add 200µl S1 + 600µl diluent
S3	1.56	Add 200µl S2 + 600µl diluent
S4	0.39	Add 200µl S3 + 600µl diluent
S5	0.10	Add 200µl S4 + 600µl diluent
S6	0.02	Add 200µl S5 + 600µl diluent
S0	0.00	500µl diluent

Related Products: T-4866: purified anti mouse Hepcidin-25 IgG
 S-1328: ELISA, high sensitivity for extracted human samples (EIAH)
 S-1465: ELISA, high sensitivity, for extracted mouse samples (EIAH)
 S-1482: ELISA, high sensitivity, for extracted rat samples (EIAH)

This product contains ProClin™ 150 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.