

ARG82734 Rat Legumain (total) ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82734-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82734-002	Standard	2 X 10 ng/vial	4°C
ARG82734-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82734-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82734-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82734-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82734-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82734-008	25X Wash buffer	20 ml	4°C
ARG82734-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82734-010	STOP solution	10 ml (Ready to use)	4°C
ARG82734-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82734 Rat Legumain (total) ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat Legumain (total) in serum, plasma (EDTA, heparin, citrate) and cell culture supernatants.
Tested Reactivity	Rat
Tested Application	ELISA
Target Name	Legumain (total)
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	16 pg/ml
Sample Type	Serum, plasma (EDTA, heparin, citrate) and cell culture supernatants.
Standard Range	31.2 - 2000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5.1% Inter-Assay CV: 6.6%

Alternate Names PRSC1; AEP; Protease, cysteine 1; LGMN1; Asparaginyl endopeptidase; Legumain; EC 3.4.22.34

Application Instructions

Assay Time ~ 5 hours

Properties

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol LGMN

Gene Full Name legumain

Background This gene encodes a cysteine protease that has a strict specificity for hydrolysis of asparaginyl bonds. This enzyme may be involved in the processing of bacterial peptides and endogenous proteins for MHC class II presentation in the lysosomal/endosomal systems. Enzyme activation is triggered by acidic pH and appears to be autocatalytic. Protein expression occurs after monocytes differentiate into dendritic cells. A fully mature, active enzyme is produced following lipopolysaccharide expression in mature dendritic cells. Overexpression of this gene may be associated with the majority of solid tumor types. This gene has a pseudogene on chromosome 13. Several alternatively spliced transcript variants have been described, but the biological validity of only two has been determined. These two variants encode the same isoform. [provided by RefSeq, Jul 2008]

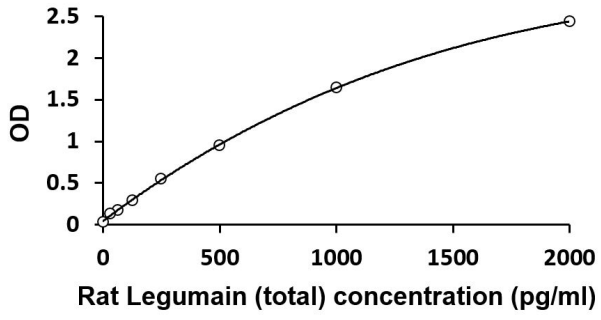
Function Has a strict specificity for hydrolysis of asparaginyl bonds. Can also cleave aspartyl bonds slowly, especially under acidic conditions. Required for normal lysosomal protein degradation in renal proximal tubules. Required for normal degradation of internalized EGFR. Plays a role in the regulation of cell proliferation via its role in EGFR degradation (By similarity). May be involved in the processing of proteins for MHC class II antigen presentation in the lysosomal/endosomal system. [UniProt]

Highlight Related products:
[Legumain antibodies](#); [Legumain ELISA Kits](#);
New ELISA data calculation tool:
[Simplify the ELISA analysis by GainData](#)

PTM Glycosylated.

Activated by autocatalytic processing at pH 4. [UniProt]

Cellular Localization Lysosome. [UniProt]



ARG82734 Rat Legumain (total) ELISA Kit standard curve image

ARG82734 Rat Legumain (total) ELISA Kit results of a typical standard run with optical density reading at 450 nm.