

ARG81480 Human Furin ELISA Kit

Package: 96 wells Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81480-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81480-002	Standard	2 X 20 ng/vial	4°C
ARG81480-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81480-004	Antibody conjugate concentrate (100X)	1 vial (100 μl)	4°C
ARG81480-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81480-006	HRP-Streptavidin concentrate (100X)	1 vial (100 μl)	4°C
ARG81480-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81480-008	25X Wash buffer	20 ml	4°C
ARG81480-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81480-010	STOP solution	10 ml (Ready to use)	4°C
ARG81480-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81480 Human Furin ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Furin in cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	Furin
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	156 pg/ml
Sample Type	Cell culture supernatants.
Standard Range	312 - 20000 pg/ml
Sample Volume	100 µl

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	FURIN	
Gene Full Name	furin (paired basic amino acid cleaving enzyme)	
Background	This gene encodes a member of the subtilisin-like proprotein convertase family, which includes proteases that process protein and peptide precursors trafficking through regulated or constitutive branches of the secretory pathway. It encodes a type 1 membrane bound protease that is expressed in many tissues, including neuroendocrine, liver, gut, and brain. The encoded protein undergoes an initial autocatalytic processing event in the ER and then sorts to the trans-Golgi network through endosomes where a second autocatalytic event takes place and the catalytic activity is acquired. The product of this gene is one of the seven basic amino acid-specific members which cleave their substrates at single or paired basic residues. Some of its substrates include proparathyroid hormone, transforming growth factor beta 1 precursor, proalbumin, pro-beta-secretase, membrane type-1 matrix metalloproteinase, beta subunit of pro-nerve growth factor and von Willebrand factor. It is also thought to be one of the proteases responsible for the activation of HIV envelope glycoproteins gp160 and gp140 and may play a role in tumor progression. This gene is located in close proximity to family member proprotein convertase subtilisin/kexin type 6 and upstream of the FES oncogene. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]	
Function	Furin is likely to represent the ubiquitous endoprotease activity within constitutive secretory pathways and capable of cleavage at the RX(K/R)R consensus motif. [UniProt]	
Highlight	Related products: <u>Furin antibodies</u> ; <u>Furin ELISA Kits</u> ; New ELISA data calculation tool: <u>Simplify the ELISA analysis by GainData</u>	
ΡΤΜ	The inhibition peptide, which plays the role of an intramolecular chaperone, is autocatalytically removed in the endoplasmic reticulum (ER) and remains non-covalently bound to furin as a potent autoinhibitor. Following transport to the trans Golgi, a second cleavage within the inhibition propeptide results in propeptide dissociation and furin activation. Phosphorylation is required for TGN localization of the endoprotease. In vivo, exists as di-, mono- and non-phosphorylated forms. [UniProt]	



ARG81480 Human Furin ELISA Kit standard curve image

ARG81480 Human Furin ELISA Kit results of a typical standard run with optical density reading at 450 nm.