

Catalog Number	A5043
Synonyms	FUR; PACE; SPC1; PCSK3; Furin
Reactivity	Human, Mouse
Tested applications	ELISA, WB
Host species	Rabbit
Background	<p>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. Like other members of this convertase family, the product of this gene specifically cleaves substrates at single or paired basic residues. Some of its substrates include parathyroid 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 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. Unlike SARS-CoV and other coronaviruses, the spike protein of SARS-CoV-2 is thought to be uniquely cleaved by this protease. Alternative splicing results in multiple transcript variants.</p>
Gene Id	5045
Isotype	IgG
Purity	Affinity purification
Swiss Prot	P09958
Recommended dilution	WB, 1:500 - 1:2000
CALCULATED MW	87kDa
OBSERVED MW	90kDa
IMMUNOGEN	A synthetic peptide corresponding to a sequence within amino acids 200-300 of human Furin (P09958).
POSITIVE SAMPLES	HeLa, HT-29, A-549, Mouse brain
CELLULAR LOCALIZATION	Cell membrane, Golgi apparatus, Single-pass type I membrane protein, trans-Golgi network membrane, Secreted, Endosome membrane
STORAGE BUFFER	Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH 7.3.

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