

HUMAN FURIN PROTEIN, HIS TAG

Cat.#: 11804

Product Name: Human FURIN Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: FUR;PACE;PCSK3;SPC1

Target: FURIN

UNIPROT ID: P09958

Description: Recombinant human FURIN protein with C-terminal 6xHis tag

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. 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. [provided by RefSeq, Aug 2020]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 61.0 kDa after removal of the signal peptide. The apparent molecular mass of FURIN-His is approximately 55–70 kDa due to glycosylation.

Molecular Characterization: FURIN(Gln27-Ala574) 6×His tag

Purity: The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

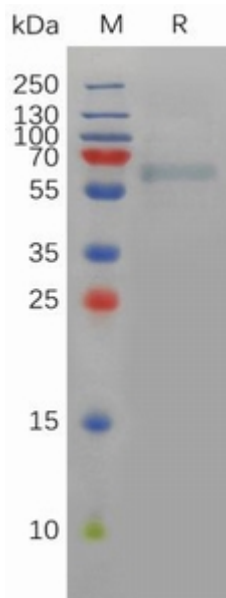


Figure 1. Human FURIN Protein, His Tag on SDS-PAGE under reducing condition.