

TECHNICAL DATA SHEET

Recombinant Human Furin (Carrier-free)

Catalog Number: 21-7106

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human Furin (Carrier-free)

DESCRIPTION

Furin is a member of the subtilisin-like proprotein convertase (PC) family, a part of the subtilisin superfamily of serine proteases. It is a type I membrane bound calcium-dependent protease and is expressed in tissues including liver, gut, brain and neuroendocrine. It is localized in the Golgi apparatus and functions to cleave various proproteins with a specific recognition sequence into their mature forms. Substrates are involved in various secretory pathways and include proalbumin, membrane type-1 matrix metalloproteinase, von Willebrand factor and parathyroid hormone.

MOLECULAR MASS

Recombinant Human Furin corresponds to residues 131 through 715 of the Furin precursor, plus a C-terminal His-tag, resulting in a 63.9 kDa protein.

AMINO ACID SEQUENCE

DLNVKAAWAQ GYTGHGIVVS ILDDGIEKNH PDLAGNYDPG ASFDVNDQDP DPQPRYTQMN DNRHGTRCAG EVAAVANNGV
 CGVGVAYNAR IGGVRMLDGE VTDAVEARSL GLNPNHIHY SASWGPEDDG KTVDGPARLA EEAFFRGVSQ GRGGLGSIFV
 WASGNGGREH DSCNCDGYTN SIYTLSSISA TQFGNVPWYS EACSSTLATT YSSGNQNEKQ IVTTDLRQKC TESHTGTSAS
 APLAAGIAL TLEANKNLTW RDMQHLVVQT SKPAHLNAND WATNGVGRKV SHSYGYLLD AGAMVALAQN WTTVAPQRKI
 IDILTEPKDI GKRLEVRKTV TACLGEPNHI TRLEHAQARL TLSYNRRGDL AIHLVSPMGT RSTLLAARPH DYSADGFNDW AFMTTHSWDE
 DPSGEWVLEI ENTSEANNYG TLTKFTLVLY GTAPEGLPVP PESSGCKTLT SSQACVVCEE GFSLHQKSCV QHCPPGFAPQ
 VLDTHYSTEN DVETIRASVC APCHACSATC QGPALTDCLS CPHASLDPV EQTCSRQSQS SRESPPQQQP PRLPPEVEAG
 QRLRAGLLPS HLPEHHHHHH HH

SOURCE

Hi-5 insect cells

APPLICATIONS

Bioassay

PURITY

95 %

STORAGE

-20°C

PROTEIN CONTENT

Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

BIOACTIVITY

Activity is determined by measuring the ability to cleave Boc-Arg-Val-Arg-Arg-AMC (Bachem Catalog# I-1645.0025), a fluorogenic peptide substrate.

RESEARCH AREAS

Cancer, Neurobiology

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Barr PJ, Mason OB, Landsberg KE, Wong PA, Kiefer MC and Brake AJ. 1991. DNA Cell Biol. 10: 319-328. Molloy SS, Bresnahan PA, Leppla SH, Klimpel KR and Thomas G. 1992. J Biol Chem. 267(23): 16396-16402. Denault JB and Leduc R. 1996. FEBS Lett. 379(2): 113-116. Creemers JW, Dominguez DI, Plets E, Serneels L, Taylor NA, Multhaupt G, Craessaerts K, Annaert W and De Strooper B. 2001. J Biol Chem. 276(6): 4211-4217. Thomas G. 2002. Nature Rev Mol

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