Marapsin (PRSS27) Active Protein

PRODUCT OVERVIEW

Product Name	Marapsin (PRSS27), Active Protein
Full Product Name	Marapsin Protein, Human, Recombinant (His Tag)
Product Gene Name	PRSS27 active protein
Product Synonym Names	Human Pancreasin/Marapsin/PRSS27 Protein (His Tag); CAPH2 Protein, Human; MPN Protein, Human; UNQ1884/PRO4327 Protein, Human; protease, serine 27
Sequence	Met1-Lys29 0
Host	HEK293 Cells
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Purity/Purification	>95% as determined by SDS-PAGE
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.
Molecular Weight	31,940 Da
OMIM	608018
3D Structure	ModBase 3D Structure for Q9BQR3
Active Protein Note	Protein activity can be an ambiguous term. Please refer to the data sheet or inquire with Technical Support to determine the definition of activity for this product.
Species	Human
Activity	Measured by its ability to cleave a colorimetric peptide substrate, NcarbobenzyloxyGlyArgThioBenzyl ester (ZGR-SBzl), in the presence of 5,5'Dithiobis (2-nitrobenzoic acid)(DTNB). The specific activity is >2000 pmols/min/ug.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Ala 23
Tag	C-His
Protein Construction	A DNA sequence encoding the human PRSS27 (Q9BQR3) extracellular domain (Met 1-Lys 290) was expressed, fused with a polyhistidine tag at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Product Categories/Family for PRSS27 active protein	Serine Proteases and Regulators

Related Product Information for PRSS27 active protein	Background: The name "Pancreasin" because it is transcribed strongly in the pancreas. This secreted, tryptic serine protease, also known as Marapsin or PRSS27 (Protease, serine, 27), is a member of the peptidase S1 family. Pancreasin is inhibited by benzamidine and leupeptin but resists several classic inhibitors of trypsin. Marapsin was constitutively expressed in nonkeratinizing stratified squamous epithelia of human esophagus, tonsil, cervix, larynx, and cornea. In fact, marapsin was the second most strongly up-regulated protease in psoriatic lesions, where expression was localized to the upper region of the hyperplastic epidermis. Similarly, in the hyperproliferative epithelium of regenerating murine skin wounds, marapsin localized to the suprabasal layers, where keratinocytes undergo squamous differentiation. Marapsin's restricted expression, localization, and cytokine-inducible expression suggest a role in the terminal differentiation of keratinocytes in hyperproliferating squamous epithelia.
Product References and Citations for PRSS27 active protein	Bhagwandin VJ, et al. (2003) Structure and activity of human pancreasin, a novel tryptic serine peptidase expressed primarily by the pancreas. J Biol Chem. 278(5): 3363-71.Li W, et al. (2009) The serine protease marapsin is expressed in stratified squamous epithelia and is up-regulated in the hyperproliferative epidermis of psoriasis and regenerating wounds. J Biol Chem. 284(1): 218-28.
Other Notes	Small volumes of PRSS27 active protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PRSS27 purchase	MBS8121089 is an active protein targeting PRSS27. Also known as Marapsin Protein, Human, Recombinant (His Tag). Host: HEK293 Cells.



SDS-Page of PRSS27 active protein

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PRSS27. It may not necessarily be applicable to this product.

NCBI GI #	971825955
NCBI GeneID	83886
NCBI Accession #	NP_001305324.1
UniProt Primary Accession #	Q9BQR3
UniProt Related Accession #	Q9BQR3
GenBank Nucleotide #	NM_001318395.1
NCBI Official Full Name	serine protease 27 isoform 2
NCBI Official Synonym Full Names	protease, serine 27
NCBI Official Symbol	PRSS27
NCBI Official Synonym Symbols	MPN; CAPH2
UniProt Protein Name	Serine protease 27
UniProt Synonym Protein Names	Marapsin; Pancreasin
Protein Family	Serine protease
UniProt Gene Name	PRSS27
UniProt Synonym Gene Names	MPN

UniProt Entry Name	PRS27_HUMAN
NCBI Protein Information	serine protease 27
NCBI Summary for PRSS27	This gene is located within a large protease gene cluster on chromosome 16. It belongs to the group-1 subfamily of serine proteases. The encoded protein is a secreted tryptic serine protease and is expressed mainly in the pancreas. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]
UniProt Comments for PRSS27	PRSS27: Belongs to the peptidase S1 family Protein type: EC 3.4.21.-; Secreted, signal peptide; Secreted; Protease Chromosomal Location of Human Ortholog: 16p13.3
Research Articles on PRSS27	**1.** Mutational tail loss is an evolutionary mechanism for liberating marapsins and other type I serine proteases from transmembrane anchors.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/prss27-active-protein/marapsin/8121089