Human Matriptase / ST14 Catalytic Domain Protein, Tag Free (active enzyme)

Catalog # MAE-H5143

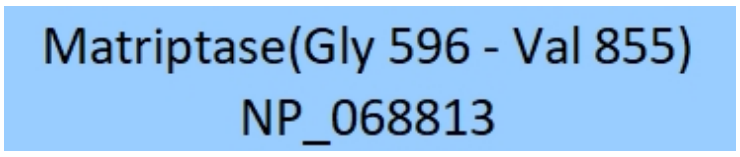
Synonym

Matriptase

Source

Human Matriptase / ST14 Catalytic Domain Protein, Tag Free(MAE-H5143) is expressed from E. coli cells. It contains AA Gly 596 - Val 855 (Accession # NP_068813).
Predicted N-terminus: Met

Molecular Characterization



This protein carries no "tag".

The protein has a calculated MW of 30.6 kDa. The protein migrates as 27-28 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 μm filtered solution in 50 mM Tris, 150 mM NaCl, 10 % Trehalose, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

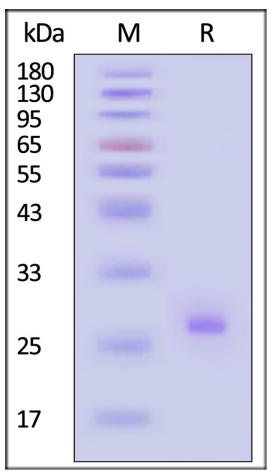
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



Human Matriptase / ST14 Catalytic Domain Protein, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity

Measured by its ability to cleave the fluorogenic peptide substrate Boc-QAR-AMC . The specific activity is >15,000 pmol/min/μg (QC tested).

Background

Degrades extracellular matrix. Proposed to play a role in breast cancer invasion and metastasis. Exhibits trypsin-like activity as defined by cleavage of synthetic substrates with Arg or Lys as the P1 site. Involved in the terminal differentiation of keratinocytes through prostasin (PRSS8) activation and filaggrin (FLG) processing; Cleaves various synthetic substrates with Arg or Lys at the P1 position and prefers small side-chain amino acids, such as Ala and Gly, at the P2 position.