

# Recombinant Bovine Transmembrane Protease, Serine 15

**Cat. No.** TMPRSS15-5347B    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant BovineTMPRSS15 is a single glycosylated polypeptide chain containing 235 aminoacids. Its molecular weightis 43000 Dalton.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Species</b>          | Bovine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Source</b>           | P.pastoris                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Description</b>      | <p>TMPRSS15 (alsocalled enterokinase) is an enzyme produced by cells of the duodenum andinvolved in human digestion. It is secreted from intestinal glands (thecrypts of Lieberkühn) following the entry of ingested food passing from thestomach. TMPRSS15 converts trypsinogen (a zymogen) into its active formtrypsin, resulting in the subsequent activation of pancreatic digestiveenzymes. TMPRSS15 is a serine protease (EC 3.4.21.9) consisting of adisulfide-linked 82-140 kDa heavy chain which anchors enterokinase in theintestinal brush border membrane and a 35-62 kDa light chain which containsthe catalytic subunit. TMPRSS15 is a part of the chymotrypsin-clan of serineproteases, and is structurally similar to these proteins.</p> |
| <b>Form</b>             | Liquid sterilefiltered in 50 mM Tris-HCl, pH 8.0 + 0.5 M NaCl + 50% Glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Molecular Weight</b> | 43.0 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Endotoxin Level</b>  | < 0.1 ng/g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Unit Definition</b>  | One unit is definedas the amount of enzyme needed to cleave 50 µg of fusion protein in 16 hoursto 95% completion at 25°C in a buffer containing 25 mM Tris-HCl, pH 7.6 +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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50mM NaCl + 2 mM CaCl<sub>2</sub>.

**Storage** Store at -20°C. 1year. Avoid repeated freeze-thaw cycles.

**OfficialSymbol** TMPRSS15

## GENE INFORMATION

**Gene Name** [TMPRSS15 transmembrane protease, serine 15\[ Bos taurus \]](#)

**Synonyms** TMPRSS15;transmembrane protease, serine 15; PRSS7; ENTK; Enterokinase; MGC133046;enterokinase; enteropeptidase; proenterokinase; Enteropeptidase precursor;Serine protease 7; EC 3.4.21.9; protease, serine, 7; serine protease(enterokinase); protease, serine, 7 (enterokinase)

**Gene ID** [282009](#)

**mRNA Refseq** [NM\\_174439](#)

**Protein Refseq** [NP\\_776864](#)

**UniProt ID** P98072

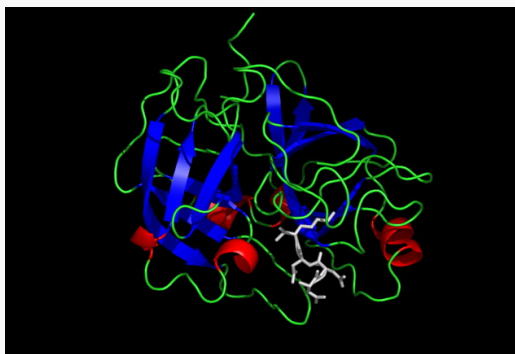
**Function** peptidaseactivity; scavenger receptor activity; serine-type endopeptidase activity

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**Crystal structure  
ofTMPRSS15 with an  
inhibitor.**



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