# Human MASP3 (450-721) Protein, His Tag (active enzyme)

Catalog # MA3-H52H3

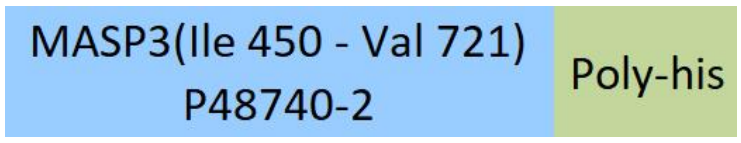
## Synonym

MASP3, MASP1, CRARF1, RaRF

## Source

Human MASP3 (450-721), His Tag(MA3-H52H3) is expressed from human 293 cells (HEK293). It contains AA Ile 450 - Val 721 (Accession # P48740-2 ).
Predicted N-terminus: Ile 450

## Molecular Characterization




This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 31.6 kDa. The protein migrates as 38-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per μg by the LAL method.

## Purity

>95% as determined by SDS-PAGE.

## Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

## Reconstitution

Please see Certificate of Analysis for specific instructions.

***For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.***

## Storage

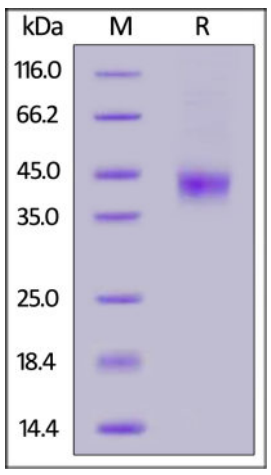
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

***Please avoid repeated freeze-thaw cycles.***

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE




Human MASP3 (450-721), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## Bioactivity

Measured by its ability to cleave a colorimetric peptide substrate, N-carbobenzyloxy-Lys-ThioBenzyl ester (Z-Lys-SBzl), in the presence of 5,5'Dithio-bis (2-nitrobenzoic acid) (DTNB).The specific activity is >7500 pmol/min/μg,as measured under the described conditions (QC tested).

## Background

MASP3 is a member of the MASP family. The MASP family proteins were first discovered as complexes with mannose-binding lectin (MBL) and therefore named MBL-associated serine proteases, but later, they were found to interact with ficolins, and later still, collectin-10 and collectin-11. As well as proteolytic enzymes (MASP-1, MASP-2, MASP-3), the group includes non-enzymatic factors (MAp19, MAp44). In this review, the association-specific factors of the lectin pathway with haematologic malignancies and related infections are discussed.

## Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.