

# Human FAM3D Protein

Cat. No. FAM-HM23D

## Description

<b>Source</b>	Recombinant Human FAM3D Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Tyr26-Phe224.
<b>Accession</b>	Q96BQ1
<b>Molecular Weight</b>	The protein has a predicted MW of 48.7 kDa. Due to glycosylation, the protein migrates to 55-65 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

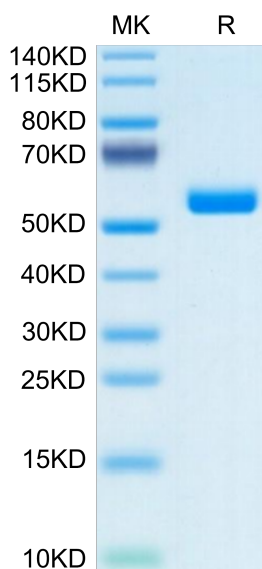
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

The physiological homeostasis of gut mucosal barrier is maintained by both genetic and environmental factors and its impairment leads to pathogenesis such as inflammatory bowel disease. A cytokine like molecule, FAM3D (mouse Fam3D), is highly expressed in mouse gastrointestinal tract. Here, we demonstrate that deficiency in Fam3D is associated with impaired integrity of colonic mucosa, increased epithelial hyper-proliferation, reduced anti-microbial peptide production and increased sensitivity to chemically induced colitis associated with high incidence of cancer.

## Assay Data

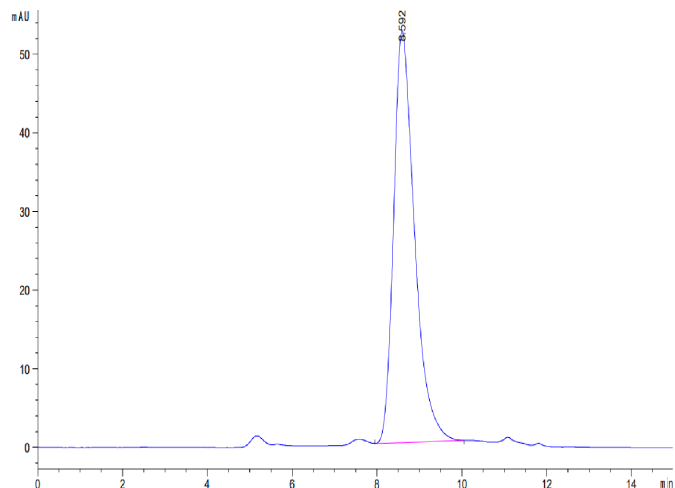
### Bis-Tris PAGE



Human FAM3D on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



The purity of Human FAM3D is greater than 95% as determined by SEC-HPLC.