

**HUMAN FAM3D PROTEIN, HFC TAG****Cat.#:** 11786**Product Name:** Human FAM3D Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** EF7;OIT1**Target:** FAM3D**UNIPROT ID:** Q96BQ1**Description:** Recombinant human FAM3D protein with C-terminal human Fc tag

**Background:** Family with sequence similarity 3 (FAM3) family is a novel cytokine-like gene family, which has four genes in this family, FAM3A, FAM3B, FAM3C, and FAM3D, each encoding a protein (224–235 amino acids) with a hydrophobic leader sequence. It had indicated that FAM3B/PANDER (pancreatic derived factor) is highly expressed in pancreas, and FAM3A and FAM3C in almost all tissues. FAM3D is abundantly expressed in placenta and weakly expressed in small intestine. Immunohistochemistry showed that FAM3A is expressed prominently in the vascular endothelium, particularly capillaries. FAM3A and FAM3B protein were both localized to the islets of Langerhans of the endocrine pancreas. Recombinant FAM3B protein has delayed effects on beta-cell function. FAM3C is involved in retinal laminar formation processes in vertebrates. NFATC2, SCP2, CACNA1C, TCRA, POLE, and FAM3D, were associated with narcolepsy. Some of these associations were further supported by gene expression analyses and an association study in essential hypersomnia (EHS), CNS hypersonia similar to narcolepsy.

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 48.2 kDa after removal of the signal peptide. The apparent molecular mass of FAM3D-hFc is approximately 53–70 kDa due to glycosylation.

**Molecular Characterization:** FAM3D(Tyr26–Phe224) hFc(Glu99–Ala330)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at –20°C to –80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at –80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

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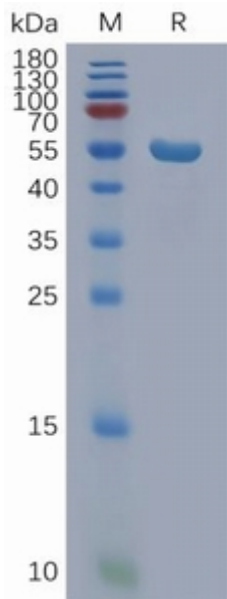


Figure 1. Human FAM3D Protein, hFc Tag on SDS-PAGE under reducing condition.