

Mouse FAM3D / Oit1 Protein (Fc Tag)



Sino Biological
Biological Solution Specialist

Catalog Number: 50951-M02H

General Information

Gene Name Synonym:

FAM3D

Protein Construction:

A DNA sequence encoding the mouse FAM3D (NP_666162.1)(Met1-Met223) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Predicted N terminal: Tyr 26

Molecular Mass:

The recombinant mouse FAM3D/Fc is a disulfide-linked homodimer. The reduced monomer comprises 439 amino acids and has a predicted molecular mass of 49.1 kDa. The apparent molecular mass of the protein is approximately 54 and 29 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

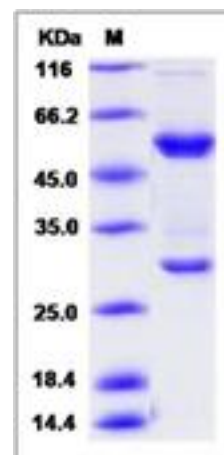
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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 hypersomnia similar to narcolepsy.

References

1. Zhu Y, et al. (2002) Cloning, expression, and initial characterization of a novel cytokine-like gene family. *Genomics*. 80(2): 144-50.
2. Katahira T, et al. (2010) Secreted factor FAM3C (ILEI) is involved in retinal laminar formation. *Biochem Biophys Res Commun*. 392(3): 301-6.
3. Shimada M, et al. (2010) An approach based on a genome-wide association study reveals candidate loci for narcolepsy. *Hum Genet*. 128(4): 433-41.