Human TM4SF1 Full Length Protein, Flag,His Tag (Detergent)

Catalog # TM1-H52D3

Application

- Immunization
- Affinity testing (SPR / BLI)
- Screening (ELISA)

Synonyms

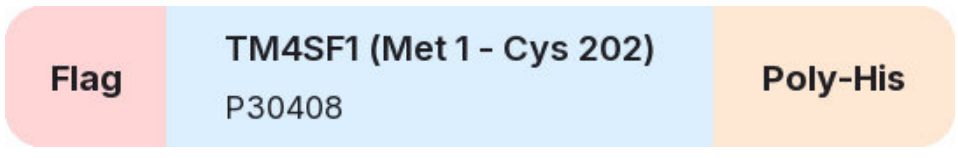
TM4SF1

Source

Detergent Human TM4SF1 Full Length Protein, Flag,His Tag (TM1-H52D3) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Cys 202 (Accession # P30408).

Predicted N-terminus: Met

Molecular Characterization

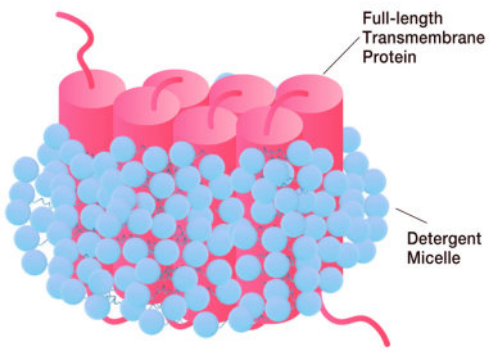


This protein carries a flag tag at the N-terminus and a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 36.6 kDa.

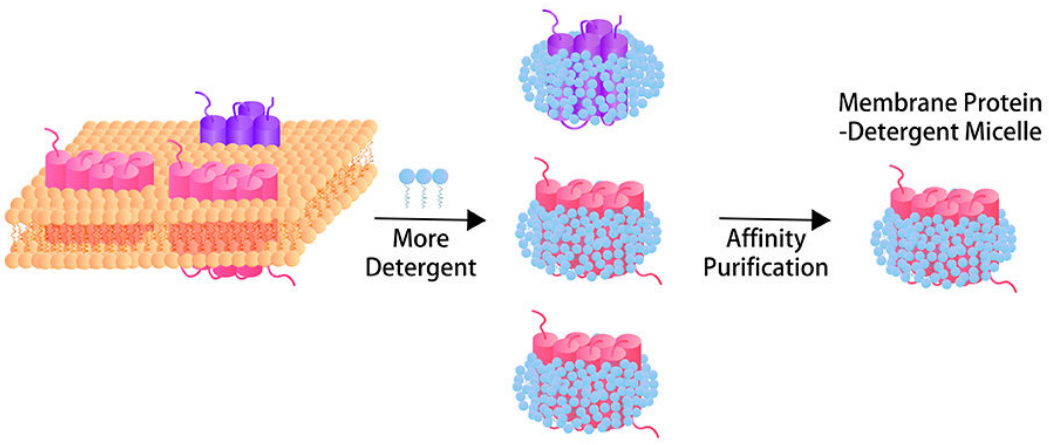
*The DDM/CHS buffer (Cat. No. DC-11) is sold separately and not included in protein, you can follow the link for product information.

- **Structure**



Each full-length transmembrane protein is encapsulated by detergent micelle.

- **Synthesis Process**



Through **mild detergent micelle extraction**, dedicated solubilization, and stringent affinity purification, we maximally retain the native transmembrane conformation of full-length transmembrane proteins throughout downstream purification. This workflow yields purified, detergent-solubilized proteins free of unrelated membrane impurities and exogenous scaffold proteins, with **exceptional purity, accurate quantitation**, and well-preserved biological activity—ideal for immunization, binding assays in antibody discovery and screening (ELISA) and affinity testing (SPR and BLI), etc.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Formulation

This product is not suitable for cell based experiments due to cytotoxicity of DDM.
DDM and CHS are INDISPENSABLE to keep membrane protein soluble and active, under no circumstances should you remove DDM and CHS.
DDM/CHS buffer (DC-11) is sold separately and not included in protein, and please contact us if you need the buffer.

If glycerol is not compatible with your application, remove glycerol just before the immediate experiment, and NEVER store glycerol-free protein solution.

Supplied as 0.2 μm filtered solution in 50 mM HEPES, 150 mM NaCl, CHS, DDM, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping and Storage

This product is supplied and shipped on dry ice.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

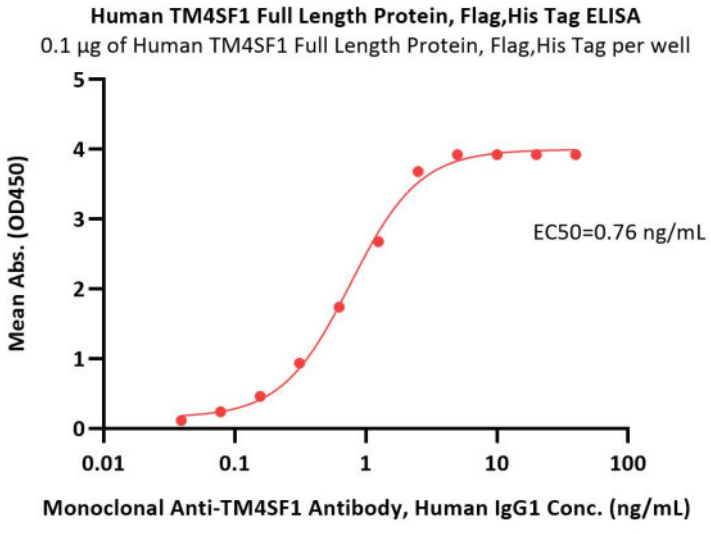
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

ACRO Quality Management System

- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

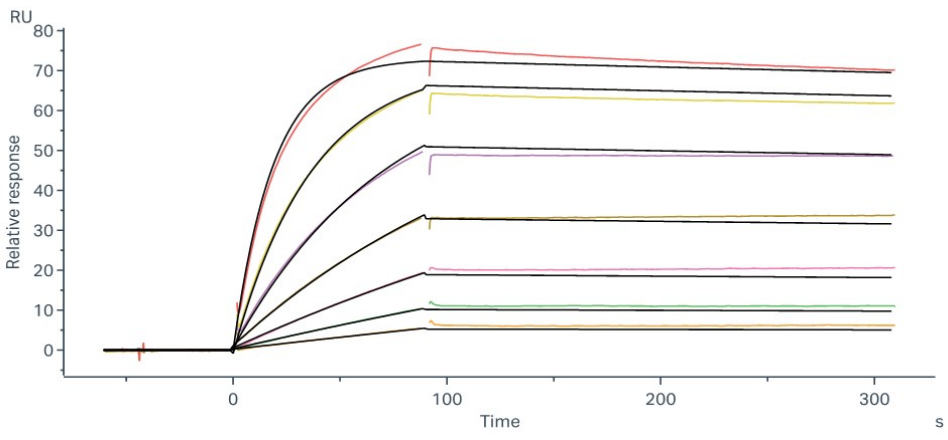
Activity-ELISA

Antibody



Immobilized Human TM4SF1 Full Length Protein, Flag,His Tag (Cat. No. TM1-H52D3) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-TM4SF1 Antibody, Human IgG1 with a linear range of 0.04-3 ng/mL (QC tested).

Activity-SPR



Human TM4SF1 Full Length Protein, Flag,His Tag (Cat. No. TM1-H52D3) captured on CM5 chip via anti-His antibody can bind Monoclonal Anti-TM4SF1 Antibody, Human IgG1 with an affinity constant of 43 pM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

A tetraspanin protein overexpressed on tumor vasculature endothelium and cancer cells, promoting angiogenesis and metastasis. TM4SF1 organizes signaling complexes at the cell surface. It is an emerging target for antibody-drug conjugates and anti-angiogenic therapies, particularly in solid tumors reliant on pathological

vessel formation.