Product Datasheet

**Sales Enquires:** sales@absoluteantibody.com
**Support Queries:** support@absoluteantibody.com
**Tel:** +44 (0) 1865 920810
**Fax:** +44 (0) 1865 920811
absoluteantibody.com

# Recombinant Mouse TIM-1 Fc-Fusion Protein

# Cat No: Pr00227-1.9

## Product Summary

**Description:** Recombinant mouse TIM-1 Fc-Fusion Protein manufactured using AbAb's Recombinant Platform

**Protein:** Mouse TIM-1

**Fc domain:** Mouse IgG1

**Structure / Form:** Disulfide-linked homodimer

**Species**: Mouse

**Construct Design Note(s)**: The extracellular domain of TIM-1 has been fused to the Fc domain of mouse IgG1.

**Host:** HEK293

**UniProt Accession Number:** Q5QNS5

**Alternative Description:** Hepatitis A virus cellular receptor 1 homolog; HAVcr-1; Kidney injury molecule 1; KIM-1; T cell immunoglobulin and mucin domain-containing protein 1; TIMD-1; T cell membrane protein 1; T-cell immunoglobulin mucin receptor 1; TIM-1; TIM-1-Ig; TIM-1-Fc chimera; TIM-1 (Fc tag)

**Published Application(s)**:

**Tested Applications(s):** ELISA, SPR

**Activity:** May play a role in T-helper cell development and the regulation of asthma and allergic diseases. Receptor for TIMD4. May play a role in kidney injury and repair (By similarity) [Uniprot].

## Product Form

**Purification:** IMAC purified

**Supplied in:** 0.1 mg size: PBS with preservative (0.02% Proclin 300), 1 mg size: PBS only.

**Endotoxin:** <1.0 EU/mg

**Shipping:** The product is shipped on blue ice. Upon receipt, store it immediately at the temperature recommended.

**Storage Recommendation:** Store at 4°C for up to 1 month. For longer term storage aliquot in small volumes and store at -20°C. Avoid repeated freeze-thaw cycles.

**SDS PAGE Purity:** >95%, as determined by SDS-PAGE and visualized by Coomassie Brilliant Blue.

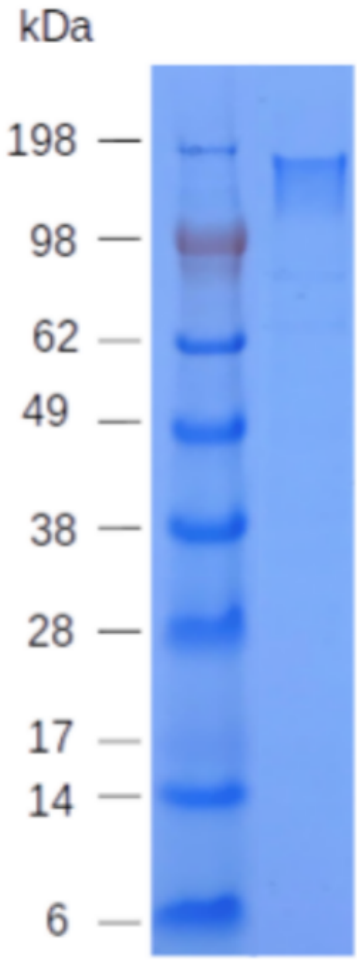
**Fc-Fusion Sequence (monomer)**

VEVKGVVGHPVTLPCTYSTYRGITTTCWGRGQCPSSACQNTLIWTNGHRVTYQKSSRYNLKGHISEGDVSLTIENSVE
SDSGLYCCRVEIPGWFNDQKVTFSLQVKPEIPTRPPTRPTTTRPTATGRPTTISTRSTHVPTSIRVSTSTPPTSTHTWTH
KPEPTTFCPHETTAEVTGIPSHTPTDWNGTVTSSGDTWSNHTEAIPPGKPQKNPTKGGGGGSVPRDQGCKPCICTVP
EVSSVFIFPPKPKDVLTITLTPKVTCVVVDISKDDPEVQFSWFVDDVEVHTAQTKPREEQINSTFRSVSELPIMHQDWLN
GKEFKCRVNSAAFPAPIEKTISKTKGRPKAPQVYTIPPPKEQMAKDKVSLTCMITNFFPEDITVEWQWNGQPAENYKNT
QPIMDTDGSYFVYSKLNVQKSNWEAGNTFTCSVLHEGLHNHHTEKSLSHSPGKHHHHHH

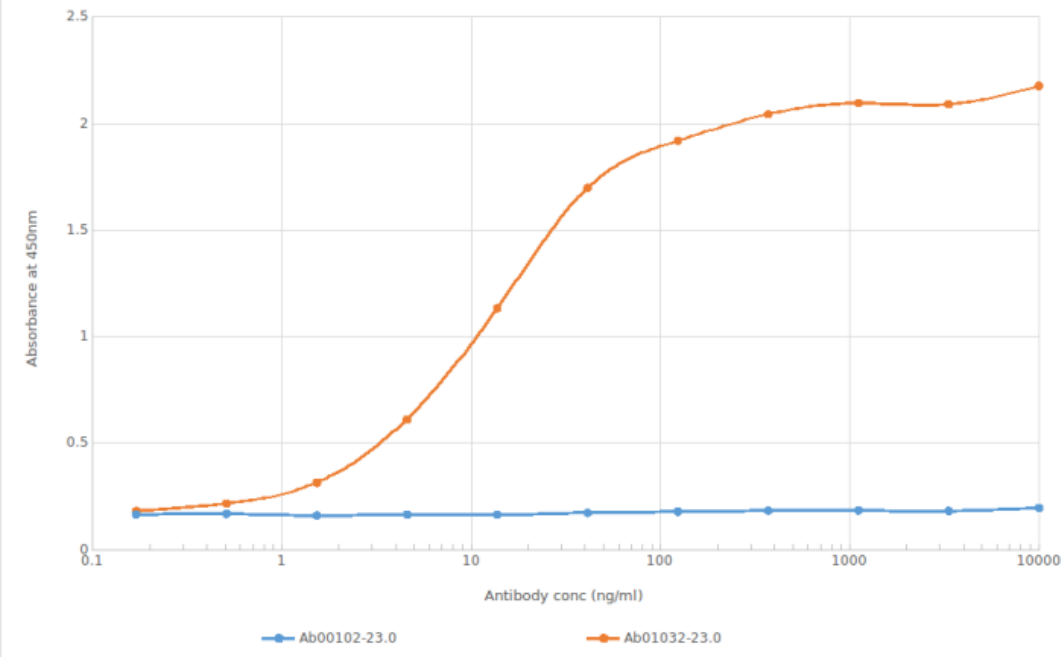
Underlined amino acids sequence include a G4S linker and 6xHis epitope tag, respectively.

**Calculated Molecular weight (dimer):** 100369 Da

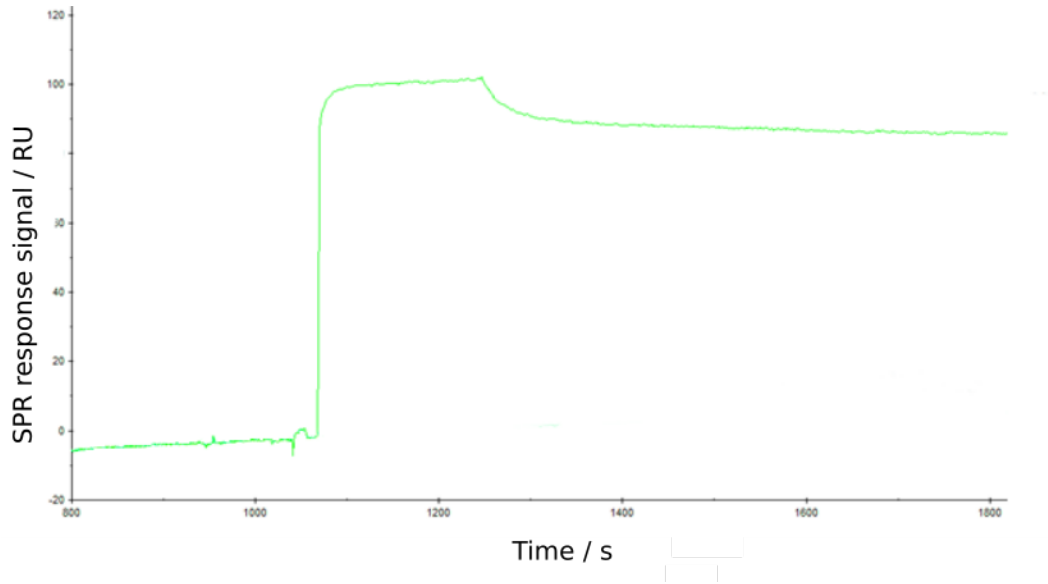
**Extinction coefficient:** 150070 (calculation performed as described by Pace *et al.* (1995), PMID: 8563639).




**TIM-1 ( Pr00227-1.9 ) SDS-PAGE.** Pr00227-1.9 under non-reducing conditions resolved by SDS-PAGE and stained using Coomassie-Blue.




**ELISA of anti-TIM-1 antibody on TIM-1-Fc fusion protein.** Binding curves of the rabbit chimeric version of the anti-TIM-1 antibody 3B3 (Ab01032-23.0; red line) and isotype control (Ab00102-23.0, anti-Fluorescein; blue line) to an ELISA plate coated with mouse TIM-1-Fc fusion protein (Pr00227-1.9) at a concentration of 5 µg/ml. A 3-fold serial dilution from 10000 to 0.17 ng/ml was performed using Ab01032-23.0. For signal detection, a 1:4000 dilution of anti-rabbit IgG1 HRP (BioRad) antibody was used.




**Surface plasmon resonance (SPR) sensorgram anti-TIM-1 (Ab01032) 3B3 binding to TIM-1 Fc-fusion protein.** Binding of mouse TIM-1 Fc-fusion protein (Pr00227-1.9) to immbolised the rabbit IgG chimeric version of 3B3 (Ab01032-23.0). Pr00227-1.9 was injected at a concentration of 5 ng/mL and allowed to associate with Ab01032-23.0 between 1080s and 1250s, before a dissociation phase between 1250s and 1800s. Pr00227-1.9 showed rapid binding to Ab01032-23.0 and following ligand removal remained strongly bound. This suggests that Ab01032-23.0 has a very high affinity for Pr00227-1.9.