

Synonym

Integrin alpha M beta 2, ITGAM&ITGB2

Source

Canine Integrin alpha M beta 2 (ITGAM&ITGB2) Heterodimer, His Tag&Tag Free (IT2-C52E2) is expressed from human 293 cells (HEK293). It contains AA Phe 18 - Pro 1106 (ITGAM) & Gln 17 - Gln 695 (ITGB2) (Accession # [A0A8C0M9J9-1](#) (ITGAM) & [Q9TU04-1](#) (ITGB2)).

Predicted N-terminus: Phe 18 | Gln 17

Molecular Characterization

ITGAM (Phe 18 - Pro 1106) A0A8C0M9J9-1	Acidic Tail	Poly-his
ITGB2 (Gln 17 - Gln 695) Q9TU04-1	Basic Tail	

Canine Integrin alpha M beta 2 (ITGAM&ITGB2) Heterodimer, His Tag&Tag Free. The protein has a calculated MW of 128 kDa | 80 kDa. The protein migrates as 80-90 kDa and 155-175 kDa under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50mM Tris 150mM NaCl PH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

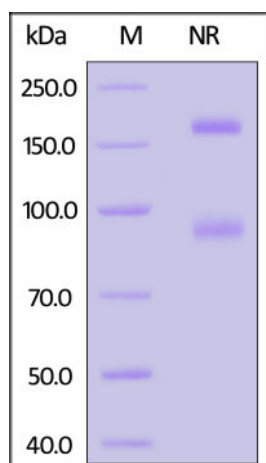
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

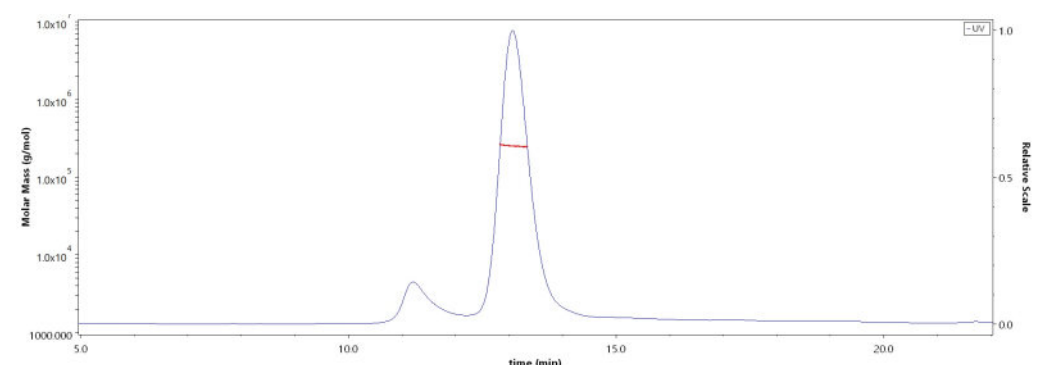
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Canine Integrin alpha M beta 2 (ITGAM&ITGB2) Heterodimer, His Tag&Tag Free on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Canine Integrin alpha M beta 2 (ITGAM&ITGB2) Heterodimer, His Tag&Tag Free (Cat. No. IT2-C52E2) is more than 85% and the molecular weight of this protein is around 226-276 kDa verified by SEC-MALS.

[Report](#)

Background

Integrin ITGAM/ITGB2 is implicated in various adhesive interactions of monocytes, macrophages and granulocytes as well as in mediating the uptake of complement-coated particles and pathogens. It is identical with CR-3, the receptor for the iC3b fragment of the third complement component. It probably recognizes the R-G-D peptide in C3b. Integrin ITGAM/ITGB2 is also a receptor for fibrinogen, factor X and ICAM1. It recognizes P1 and P2 peptides of fibrinogen gamma chain. In association with beta subunit ITGB2/CD18, required for CD177-PRTN3-mediated activation of TNF primed neutrophils. May regulate phagocytosis-

induced apoptosis in extravasated neutrophils. May play a role in mast cell development. Required with TYROBP/DAP12 in microglia to control production of microglial superoxide ions which promote the neuronal apoptosis that occurs during brain development.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.