

Synonym

Integrin alpha 4 beta 7,ITGA4&ITGB7

Source

Biotinylated Human ITGA4&ITGB7 Heterodimer Protein, His,Avitag&Tag Free(IT7-H82W9) is expressed from human 293 cells (HEK293). It contains AA Tyr 34 - Thr 977 (ITGA4) & Glu 20 - His 723 (ITGB7) (Accession # [P13612-1](#) (ITGA4) & [P26010-1](#) (ITGB7)).

Predicted N-terminus: Tyr 34 & Ser 592 (ITGA4) & Glu 20 (ITGB7)

Molecular Characterization

Biotinylated Human ITGA4&ITGB7 Heterodimer Protein, His,Avitag&Tag Free, produced by co-expression of ITGA4 and ITGB7, has a calculated MW of 113.2 kDa (ITGA4) and 81.8 kDa (ITGB7). Subunit ITGA4 is fused with an acidic tail at the C-terminus and followed by a polyhistidine tag and an Avi tag (Avitag™) and subunit ITGB7 contains no tag but a basic tail at the C-terminus. The ITGA4 subunit is composed of a heavy chain (Tyr 34 - Arg 591, calculated MW 61.1 kDa) and a light chain (Ser 592 - Thr 977, calculated MW 52.1 kDa).

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Formulation

Please contact us for detailed information.

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.

Background

Integrin alpha 4 beta 7 is an integrin family adhesion receptor that shares subunits with alpha 4 beta 1 (VLA4) and the E-Cadherin receptor, alpha E beta 7. Integrin alpha 4 beta 7, which is critical for homing to intestinal mucosa, is induced during T cell activation in Peyer's patches or mesenteric lymph nodes. Its expression requires signals from local dendritic and stromal cells, including secreted retinoic acid. The HIV-1 envelope protein gp120 binds to the active form of Integrin alpha 4 beta 7, and this may or may not account for the concentration of HIV-1 virus in the gut-associated lymphoid tissue (GALT). Integrin alpha 4 beta 7 may also be involved in lymphocyte trafficking in acute intestinal graft vs. host disease (GVHD).

Clinical and Translational Updates

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