

Mouse Integrin alpha 1 beta 1 (ITGA1&ITGB1) Heterodimer Protein

Cat. No. ITG-MM1A1

Description

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|-------------------------|--|
| Source | Recombinant Mouse Integrin alpha 1 beta 1 (ITGA1&ITGB1) Heterodimer Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Phe29-Pro1141(ITGA1) acidic tail&Gln21-Asp728(ITGB1) basic tail. |
| Accession | Q3V3R4(ITGA1)&P09055-1(ITGB1) |
| Molecular Weight | The protein has a predicted MW of 129.00 kDa (ITGA1)&82.80 kDa (ITGB1). Due to glycosylation, the protein migrates to 140-200 kDa (ITGA1) and 100-115 kDa (ITGB1) based on Tris-Bis PAGE result. |
| Endotoxin | Less than 1EU per µg by the LAL method. |
| Purity | > 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC |

Formulation and Storage

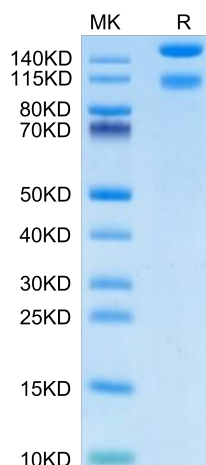
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| Formulation | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water. |
| Storage | -20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

Background

Integrin $\alpha 1\beta 1$ is a heterodimer of the Integrin subunits alpha 1 and beta 1 and is one of four collagenbinding integrins, it preferentially binds Collagens I, IV, VI, XIII and XVI, but also binds Laminin. Integrin $\alpha 1\beta 1$ is widely expressed in mesenchyme and the immune system, as well as a minority of epithelial tissues. It can suppress EGFR signaling, increase expression of Caveolin-1, reduce production of reactive oxygen species, regulate collagen expression, regulate MMP collagenase and gelatinase activity, and mediates the renal basement membrane disorder Alport syndrome.

Assay Data

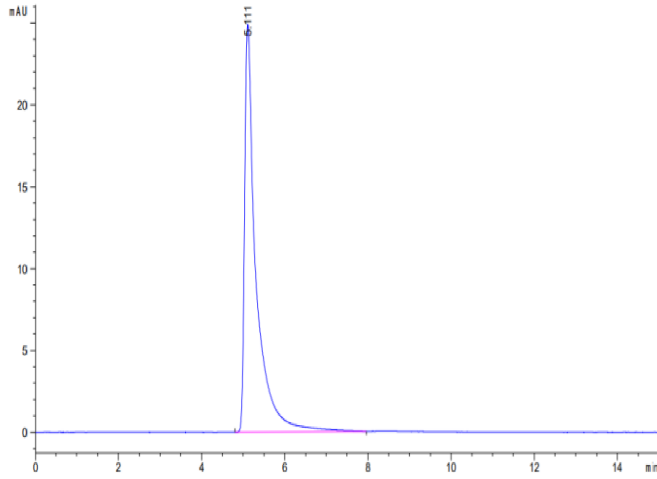
Tris-Bis PAGE



Mouse ITGA1&ITGB1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



The purity of Mouse ITGA1&ITGB1 is greater than 95% as determined by SEC-HPLC.