

## Active Recombinant Mouse Integrin Alpha 4, His-tagged

**Cat. No.** Itga4-5665M    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Mouse Itga4 protein was expressed in Chinese Hamster Ovary cell line. Mouse Integrin $\alpha$ 4, Tyr34-Gln970 and Mouse Integrin $\beta$ 1 Gln21-Asp728 with an N-terminal and with a C-terminal 6-His tag.
<b>Species</b>	Mouse
<b>Source</b>	CHO
<b>Protein Length</b>	34-970;21-728 a.a.
<b>Description</b>	Itga4 is an integrin family adhesion receptor that shares the $\beta$ 1 subunit with eleven other family members and the $\alpha$ 4 subunit with Integrin $\alpha$ 4 $\beta$ 7. The non-covalent heterodimer of 150 kDa $\alpha$ 4/CD49d and 130 kDa $\beta$ 1/CD29 type I transmembrane glycoprotein subunits mediates cell adhesion to VCAM-1/CD106 on other cells and the CS-1 fragment of fibronectin in the extracellular matrix. The $\alpha$ 4 extracellular domain (ECD) contains an N-terminal $\beta$ -propeller structure, followed by domains termed thigh, calf-1 and calf-2.
<b>Form</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS.
<b>N-terminal Sequence</b>	Tyr34 (Integrin $\alpha$ 4) & Gln21 predicted (Integrin $\beta$ 1)
<b>Molecular Weight</b>	112.9 kDa (Integrin $\alpha$ 4) & 86.4 kDa (Integrin $\beta$ 1)

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<b>Activity</b>	Measured by the ability of the immobilized protein to support the adhesion of VCAM-1 transfected Chinese hamster ovary (CHO) cells. When 5x10 <sup>4</sup> cells/well are added to Recombinant Mouse Itga4 coated plates (10 µg/mL, 100 µL/well), approximately 55-85% will adhere after 1 hour at 37°C.
<b>Endotoxin Level</b>	<1.0 EU per 1 µg of the protein by the LAL method.
<b>SDS-PAGE</b>	145-160 kDa and 120-140 kDa, reducing conditions.
<b>Purity</b>	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
<b>Reconstitution</b>	100 µg/mL in sterile PBS
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">Itga4</a> integrin alpha 4 [ <i>Mus musculus</i> ]
<b>Official Symbol</b>	<a href="#">Itga4</a>
<b>Synonyms</b>	Itga4; integrin alpha 4; CD49D; integrin alpha-4; integrin alpha-IV; LPAM subunit alpha; VLA-4 subunit alpha; VLA-4 receptor, alpha 4 subunit; CD49 antigen-like family member D; lymphocyte Peyer patch adhesion molecules subunit alpha
<b>Gene ID</b>	<a href="#">16401</a>
<b>mRNA Refseq</b>	<a href="#">NM_010576</a>

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<b>Protein Refseq</b>	NP_034706
<b>UniProt ID</b>	P09055
<b>Chromosome Location</b>	2
<b>Pathway</b>	Adaptive ImmuneSystem; Arrhythmogenic right ventricular cardiomyopathy (ARVC); Cell adhesionmolecules (CAMs); Cell surface interactions at the vascular wall; Dilatedcardiomyopathy; ECM-receptor interaction; Focal Adhesion; Hemartopoietic celllineage; Hemostasis; Hypertrophic cardiomyopathy (HCM); Immune System;Integrin cell surface interactions; Integrin-mediated cell adhesion;Intestinal immune network for IgA production; Leishmaniasis; Leukocytettransendothelial migration; Regulation of actin cytoskeleton; SignalTransduction
<b>Function</b>	fibronectin binding;fibronectin binding

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