LILRB4/CD85k/ILT3 Protein, Mouse (HEK293, Fc)

Cat. No.:	HY-P75866
Synonyms:	Leukocyte immunoglobulin-like receptor subfamily B member 4; CD85k; Lilrb4; Gp49b
Species:	Mouse
Source:	HEK293
Accession:	Q64281 (M1-K238)
Gene ID:	14728
Molecular Weight:	Approximately 50.8 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	LILRB4/CD85k/ILT3, an inhibitory receptor intricately involved in immune regulation, plays a crucial role in down-regulating immune responses. It serves as a receptor for FN1 and integrin ITGAV/ITGB3, exerting inhibitory effects on IgE-mediated mast cell activation and KITLG/SCF-mediated mast cell activation. Through its interaction with ITGAV/ITGB3, LILRB4/ILT3 further inhibits antibody production by memory and marginal zone B cells, likely by suppressing their differentiation into plasma cells. This multifaceted receptor extends its inhibitory influence to diverse immune functions, such as suppressing IFNG production by CD8 T cells, CD4 T cells, and natural killer cells, as well as inhibiting antigen presentation by dendritic cells to T cells, preventing T cell activation. Additionally, LILRB4/ILT3 effectively inhibits lipopolysaccharide-mediated neutrophil-dependent vascular injury and contributes to the suppression of the allergic inflammatory response by impeding the infiltration of neutrophils and eosinophils while preventing mast cell degranulation. Its interactions, particularly when tyrosine phosphorylated, with SH2 domain-containing phosphatases PTPN6/SHP-1 and PTPN11/SHP-2 enhance the inhibition of mast cell activation.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA