CD160 Protein, Mouse (159a.a, HEK293, Fc)

Cat. No.:	HY-P75441
Synonyms:	CD160 antigen; CD160
Species:	Mouse
Source:	HEK293
Accession:	O88875 (M28-L160)
Gene ID:	54215
Molecular Weight:	Approximately 41.9 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	CD160, a versatile receptor on immune cells, orchestrates stimulatory or inhibitory signals crucial for regulating cell activation and differentiation. It exhibits dual forms—GPI-anchored and transmembrane—each presumably initiating distinct signaling pathways. In activated NK cells, CD160 triggers phosphoinositol 3-kinase pathways, while in activated T cells, it engages LCK and CD247/CD3 zeta chain signaling. CD160 serves as a receptor for both classical and non-classical MHC class I molecules, contributing to the intricate regulation of immune responses. Additionally, it functions as a receptor or ligand for TNFRSF14, enabling bidirectional cell-cell contact signaling between antigen-presenting cells and lymphocytes. Upon TNFRSF14 ligation, CD160 provides a stimulatory signal to NK cells, enhancing IFNG production and bolstering anti-tumor immune responses. Conversely, on activated CD4+ T cells, CD160 interacts with TNFRSF14 to down-regulate CD28 costimulatory signaling, thereby constraining memory and alloantigen-specific immune responses. In the context of bacterial infection, CD160 acts as a ligand for TNFRSF14 on epithelial cells, triggering the production of antimicrobial proteins and pro-inflammatory cytokines. The soluble GPI-cleaved form, often released by activated lymphocytes, likely plays an immune regulatory role by limiting lymphocyte effector functions.

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