Product Datasheet

Recombinant Rat Ephrin-A5(Efna5)

Catalog No: #AP70259

Package Size: #AP70259-1 20ug #AP70259-2 100ug #AP70259-3 1mg



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Description

Product Name	Recombinant Rat Ephrin-A5(Efna5)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:21-203aaSequence Info:Full Length
Other Names	AL-1EPH-related receptor tyrosine kinase ligand 7 ;LERK-7
Accession No.	P97605
Calculated MW	25.2 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	QDPGSKVVADRYAVYWNSSNPRFQRGDYHIDVCINDYLDVFCPHYEDSVPEDKTERYVLYMVNFDGYSACD
	${\tt HTSKGFKRWECNRPHSPNGPLKFSEKFQLFTPFSLGFEFRPGREYFYISSAIPDNGRRSCLKLKVFVRPTNSC}$
	MKTIGVRDRVFDVNDKVENSLEPADDTVHESAEPSRGEN
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability
	of the protein itself.
	Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months
	at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for
	up to one week.

Background

Cell surface GPI-bound ligand for Eph receptors, a family of receptor tyrosine kinases which are crucial for migration, repulsion and adhesion during neuronal, vascular and epithelial development. Binds promiscuously Eph receptors residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Induces compartmentalized signaling within a caveolae-like mbrane microdomain when bound to the Extracellular domain of its cognate receptor. This signaling event requires the activity of the Fyn tyrosine kinase. Activates the EPHA3 receptor to regulate cell-cell adhesion and cytoskeletal organization. With the receptor EPHA2 may regulate lens fiber cells shape and interactions and be important for lens transparency maintenance. May function actively to stimulate axon fasciculation. The interaction of EFNA5 with EPHA5 also mediates communication between pancreatic islet cells to regulate glucose-stimulated insulin secretion. Cognate,functional ligand for EPHA7, their interaction regulates brain development modulating cell-cell adhesion and repulsion.

References

Cloning of AL-1, a ligand for an Eph-related tyrosine kinase receptor involved in axon bundle formation. Winslow J.W., Moran P., Valverde J., Shih A., Yuan J.Q., Wong S.C., Tsai S.P., Goddard A., Henzel W.J., Hefti F., Beck K.D., Caras I.W.Neuron 14:973-981(1995)Research Topic:Others

Note: This product is for in vitro research use only and is not intended for use in humans or animals.