

Datasheet for ABIN7320207

DLL4 Protein (His tag)**1** Image[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	DLL4
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This DLL4 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse DLL4 Protein (His Tag)(Active)
Sequence:	Met 1-Pro 525
Characteristics:	A DNA sequence encoding the extracellular domain of mouse DLL4 (NP_062327.2) (Met 1-Pro 525) was expressed, with a C-terminal polyhistidine tag.
Purity:	> 96 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	1. Measured by its binding ability in a functional ELISA. Immobilized mouse DLL4-his at 10 µg/mL (100 µL/well) can bind biotinylated mouse NOTCH1-his. The EC50 of biotinylated mouse NOTCH1-his is 30 ng/mL.2. Measured by the ability of the immobilized protein to enhance BMP2-induced alkaline phosphatase activity in C3H10T1/2 mouse embryonic fibroblast cells. The ED50 for this effect is typically 0.2-3 µg/mL.

Target Details

Target:	DLL4
Alternative Name:	DLL4 (DLL4 Products)
Background:	<p>Background: Delta-like protein 4 (DLL4, Delta4), a type I membrane-bound Notch ligand, is one of five known Notch ligands in mammals and interacts predominantly with Notch 1, which has a key role in vascular development. Recent studies yield substantial insights into the role of DLL4 in angiogenesis. DLL4 is induced by vascular endothelial growth factor (VEGF) and acts downstream of VEGF as a 'brake' on VEGF-induced vessel growth, forming an autoregulatory negative feedback loop inactivating VEGF. DLL4 is downstream of VEGF signaling and its activation triggers a negative feedback that restrains the effects of VEGF. Attenuation of DLL4/Notch signaling results in chaotic vascular network with excessive branching and sprouting. DLL4 is widely distributed in tissues other than vessels including many malignancies. Furthermore, the molecule is internalized on binding its receptor and often transported to the nucleus. In pathological conditions, such as cancer, DLL4 is up-regulated strongly in the tumour vasculature. Blockade of DLL4-mediated Notch signaling strikingly increases nonproductive angiogenesis, but significantly inhibits tumor growth in preclinical mouse models. In preclinical studies, blocking of DLL4/Notch signaling is associated with a paradoxical increase in tumor vessel density, yet causes marked growth inhibition due to functionally defective vasculature. Thus, DLL4 blockade holds promise as an additional strategy for angiogenesis-based cancer therapy.</p> <p>Synonym: Delta4</p>
Molecular Weight:	55.7 kDa
NCBI Accession:	NP_062327
Pathways:	Notch Signaling

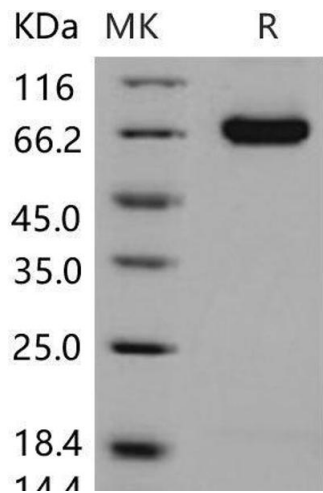
Application Details

Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C, -20 °C, -80 °C

Handling

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.
Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.