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Biotin Human CD171/L1CAM Protein (C-His-Avi)

Catalog Number:	805103, 805104
Size:	25 ug, 100 ug
Target Name:	CD171, L1CAM
Regulatory Status:	RUO

PRODUCT DETAILS

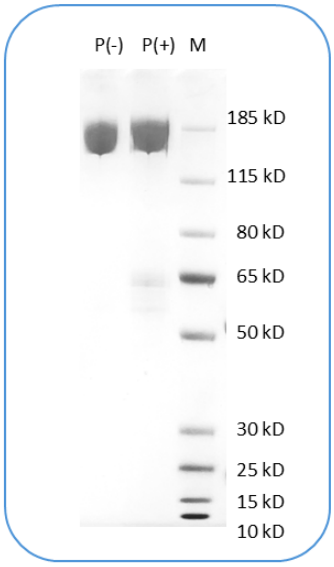
Application:	ELISA, BLI
Format:	Liquid, Biotinylated
Expression Host:	CHO
Species:	Human
Sources:	Recombinant Human CD171/L1CAM protein (Ile20-Glu1120) with C-terminus His-Avi tag is expressed in CHO cells. This protein was site-specifically labeled with Biotin by BirA ligase.
Accession Number:	P32004
Molecular Weight:	The protein has a predicted molecular weight of 126.7 kDa. Under DTT-reducing conditions, it migrates at approximately 160-200 kDa on SDS-PAGE.
Affinity Tag:	C-His-Avi
Purity:	>95% based on SDS-PAGE under reducing condition
Formulation:	1xPBS buffer, pH7.4, 0.22 μm filtered
Endotoxin level:	Not tested
Protein Concentration:	25μg size is bottled at 0.2mg/mL concentration. 100 μg size is supplied at a lot-specific concentration.
Storage and Handling:	Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 μm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ –70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

BACKGROUND INFORMATION

CD171, also known as L1CAM or L1, is a 200–220 kD transmembrane glycoprotein and a member of the immunoglobulin superfamily, originally identified for its essential role in nervous system development. It mediates neuron-neuron adhesion, axon guidance, signal transduction, cell migration, and differentiation. Although initially thought to be restricted to neural tissue, L1CAM has since been detected in various non-neural tissues and numerous cancer types. Its expression in tumors is associated with increased cell motility, proliferation, treatment resistance, and poor prognosis, making it a promising target for anti-cancer therapy. Mutations in the L1CAM gene are responsible for the CRASH spectrum of X-linked neurological disorders, including corpus callosum

hypoplasia, mental retardation, aphasia, spastic paraplegia, and hydrocephalus. L1CAM interacts with several ligands such as integrins, axonin-1, CD9, and neurocan, with the RGD motif in its sixth Ig domain playing a key role in integrin binding and intracellular signaling.

PRODUCT DATA



Human CD171 protein (C-His-Avi) was biotinylated in vitro using BirA ligase. SDS-PAGE analysis under reducing (P+) and non-reducing (P−) conditions shows the protein has a purity greater than 95%.