

## APC Human CD171/L1CAM Protein (C-His)

<b>Catalog Number:</b>	805303, 805304
<b>Size:</b>	25 ug, 100 ug
<b>Target Name:</b>	CD171, L1CAM
<b>Regulatory Status:</b>	RUO

### PRODUCT DETAILS

---

<b>Application:</b>	Flow Cytometry
<b>Format:</b>	Liquid, APC
<b>Expression Host:</b>	CHO
<b>Species:</b>	Human
<b>Sources:</b>	Recombinant Human CD171/L1CAM protein (Ile20-Glu1120) with C-terminus His tag is expressed in CHO cells and conjugated to APC
<b>Accession Number:</b>	P32004
<b>Molecular Weight:</b>	The protein has a predicted molecular weight of 124.7 kDa. Under DTT-reducing conditions, it migrates at approximately 160-200 kDa on SDS-PAGE prior to conjugation.
<b>Affinity Tag:</b>	C-His
<b>Formulation:</b>	1xPBS buffer, pH7.4, 0.09% NaN3 with a carrier protein
<b>Endotoxin level:</b>	Not tested
<b>Protein Concentration:</b>	25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.
<b>Storage and Handling:</b>	Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2-8°C for up to six months.

### 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.