

Technical Data Sheet

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

Catalog Number: 805303, 805304

Size: 25 ug, 100 ug

Target Name: CD171, L1CAM

Regulatory Status: RUO

Product Details

Application: FC

Format: Liquid, APC

Expression Host: CHO

Species: Human

Sources: Recombinant Human CD171/L1CAM protein (Ile20-Glu1120) with C-terminus His tag is expressed in CHO cells and conjugated to APC

Accession Number: P32004

Molecular Weight: 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.

Affinity Tag: C-His

Formulation: 1xPBS buffer, pH7.4, 0.09% NaN₃ with a carrier protein

Endotoxin level: Not tested

Protein Concentration: 25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.

Storage and Handling: 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 neuroman, with the RGD motif in its sixth Ig domain playing a key role in integrin binding and intracellular signaling.