InnoCyto Inc.
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Technical Data Sheet

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

Catalog Number: 805301, 805302
Size: 25 ug, 100 ug
Target Name: CD171, L1CAM
Regulatory Status: RUO

Product Details

Application: FC
Format: Liquid, PE
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 PE
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.
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 neurocan, with the RGD motif in its sixth Ig domain playing a key role in integrin binding and intracellular signaling.