



# Recombinant Protein Technical Manual

## Recombinant Human CD171/L1CAM Protein (His Tag)

RPES1499

### Product Data:

**Product SKU:** RPES1499

**Size:** 100µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_000416.1

### Protein Information:

**Molecular Mass:** 125 kDa

**AP Molecular Mass:** 160-200 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 85 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** CAML1;CD171;HSAS;HSAS1;MASA;MIC5;N-CAM-L1;N-CAML1;NCAM-L1;S10;SPG1

## Immunogen Information:

**Sequence:** Met 1-Glu 1120

## Background:

L1 cell adhesion molecule (L1CAM), also designated as CD171, is a cell adhesion receptor of the immunoglobulin superfamily, known for its roles in nerve cell function. While originally believed to be present only in brain cells, in recent years L1-CAM has been detected in other tissues, and in a variety of cancer cells, including some common types of human cancer. L1CAM interacts with a variety of ligands including axonin, CD9, neurocan and integrins, and it has been revealed that the RGD motif in the sixth Ig domain of L1CAM is a binding site for integrins, thus important for nuclear signaling. Disruption of L1CAM function causes three X-linked neurological syndromes, i. e. hydrocephalus, MASA syndrome (mental retardation, aphasia, shuffling gait and adducted thumbs) and spastic paraplegia syndrome. Overexpression of L1CAM in normal and cancer cells increased motility, enhanced growth rate and promoted cell transformation and tumorigenicity. Recent work has identified L1CAM (CD171) as a novel marker for human carcinoma progression, and a candidate for anti-cancer therapy.