

Recombinant Protein Technical Manual Recombinant Human Contactin 4/CNTN4 Protein (His Tag)

Product Data:

Product SKU: RPES5222 **Size:** 20μg

Species: Human Expression host: Baculovirus-Insect Cells

RPES5222

Uniprot: Q8IWV2

Protein Information:

Molecular Mass: 110 kDa

AP Molecular Mass: 12030 kDa

Tag: C-His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ 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 20mM Tris, 500mM NaCl, pH 8.5, 10% gly

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

Application:

Synonyms: AXCAM;BIG-2

Immunogen Information:

Sequence: Met 1-Ser 1000

Background:

Contactin-4, abbreviated as CNTN4, is a brain-derived protein belonging to the immunoglobulin superfamily. It has been found high expression in testes, thyroid, small intestine, uterus and brain. This protein is an neuronal membrane protein that functions as an glycosylphosphatidylinositol- anchored cell adhesion molecule. Contactin-4 is considered as a candidate protein responsible for the differentiation potential of human neuroblastoma cells and it has been implicated in some cases of autism and spinocerebellar ataxia type 16. Studies of the cantactin family have revealed a complex pattern of hemophilic and heterophilic interactions that are required for axon growth and pathfinding. Such studies demonstrate that these essential functions are mediated by the combination and juxtaposition of multiple Ig and FNIII domains. Second, these neuronal adhesion molecules demonstrate highly regulated temporal and spatial expression patterns in the CNS. For this reason, the disruption of the regulatory region of the predominant brain-expressed isoform reasonable would be expected to have significant functional consequences.