

Recombinant Human Contactin 1/CNTN1 Protein (His Tag)

Catalog No. PKSH031640

Note: Centrifuge before opening to ensure complete recovery of vial contents.

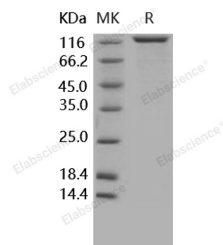
Description

Synonyms	Contactin 1;F3;GP135;MYPCN
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-993
Accession	NP_001834.2
Calculated Molecular Weight	110 kDa
Observed molecular weight	125 kDa
Tag	C-His
Bioactivity	Measured by the ability of the immobilized protein to support the adhesion of C6 rat glial cells. When cells are added to CNTN1 coated plates (2 µg/ml, 100 µl/well), 35%-45% will adhere specifically after 60 minutes at 37°C.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Contactins are a subgroup of molecules belonging to the immunoglobulin superfamily that are expressed exclusively in the nervous system. The subgroup consists of six members: Contactin-1, Contactin-2 (TAG-1), Contactin-3 (BIG-1), BIG-2, Contactin-5 (NB-2) and NB-3. Axonal expression and the neurite extension activity of Contactin-1 and Contactin-2 attracted researchers to study the function of these molecules in axon guidance during development. Contactin-1 and Contactin-2 have come to be known as the principal molecules in the function and maintenance of myelinated neurons. In contrast, the function of the other four members of this subgroup remained unknown until recently. Contactin-1 is a cell surface adhesion molecule that is normally expressed by neurons and oligodendrocytes. Particularly high levels of Contactin-1 are present during brain development. Contactin-1 and Contactin-2 are differentially expressed in a number of neuronal tissues during development, and they interact with several ligands including Nr-CAM, L1, NCAM, neurocan, phosphacan, and tenascin. As a cell adhesion molecule, Contactin-1 plays a role in the formation of axon connections in the developing nervous system. It was demonstrated that Contactin-1 participates in signal pathways via its association with Contactin-associated protein (CNTNAP1), receptor protein tyrosine phosphatase beta (RPTPb) and NOTCH1. Contactin-1 is also involved in paranodal axo-glial junction formation and oligodendrocytes generation.