



Recombinant Protein Technical Manual

Recombinant Rat Contactin 3/CNTN3 Protein (Fc Tag)

RPES4547

Product Data:

Product SKU: RPES4547

Size: 50µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: NP_062202.1

Protein Information:

Molecular Mass: 134.8 kDa

AP Molecular Mass: 135 kDa

Tag: C-Fc

Bio-activity:

Purity: > 85 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein 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: CNTN3

Immunogen Information:

Sequence: Met1-Gly1001

Background:

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, Contactin-2(TAG), Contactin-3(BIG), BIG-2, Contactin-5(NB-2) and NB-3. Since their identification in the late 1980s, Contactin and Contactin-2 have been studied extensively. Axonal expression and the neurite extension activity of Contactin and Contactin-2 attracted researchers to study the function of these molecules in axon guidance during development. Contactin 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-3, also known as CNTN3 (BIG in rat and PANG in mouse), is a GPI-linked glycoprotein that is expressed on cerebellar Purkinje cells, amygdaloid and thalamic neurons and olfactory granule cells. In the brain, Contactin-3 is expressed in frontal lobe, occipital lobe, cerebellum and amygdala. Contactin-3 contains 4 fibronectin type-III domains and 6 Ig-like C2-type (immunoglobulin-like) domains. Human Contactin-3 shares 92% aa identity with mouse Contactin-3. The exact function of Contactin-3 is unclear. Contactin-3 may mediate cell-cell interaction and may promote neurite outgrowth.