



Recombinant Protein Technical Manual

Recombinant Mouse Contactin 5/CNTN5 Protein (His Tag)(Active) RPES2821

Product Data:

Product SKU: RPES2821

Size: 20µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: P68500

Protein Information:

Molecular Mass: 115.2 kDa

AP Molecular Mass: 118 kDa

Tag: C-His

Bio-activity: Measured by the ability of the immobilized protein to support the adhesion of C6 cells. When 5×10^4 cells/well are added to CNTN5-coated plates (0.8 µg/mL and 100 µL/well), approximately >70% cells will adhere specifically after 60 minutes at 37°C.

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: 6720426O10Rik;A830025P08Rik;Gm507;NB-2

Immunogen Information:

Sequence: Met1-Gln1058

Background:

Contactins are a subgroup of molecules belonging to the immunoglobulin superfamily that are expressed mainly 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-5, also known as NB-2, is one of the neural recognition molecules in the contactin subgroup. Contactin-5 is expressed in brain and kidney and at very low level in placenta. In brain, Contactin-5 is highly expressed in the occipital lobe, amygdala, cerebral cortex, frontal lobe, thalamus and temporal lobe. Mice deficient in the Contactin-5 gene exhibit aberrant responses to acoustic stimuli. Contactin-5 may play a role in maturation of glutamatergic synapses in the brainstem during the final stages of auditory development. Contactin-5 gene may contribute to human neurological disorders.