

## Recombinant Human Contactin 3/CNTN3 Protein (708 Asp/Asn, His Tag)

Catalog No. PKSH031802

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

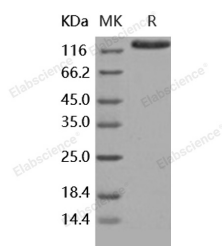
### Description

<b>Synonyms</b>	BIG-1;PANG;PCS
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Ser1002; 708 Asp/Asn
<b>Accession</b>	NP_065923.1
<b>Calculated Molecular Weight</b>	109.2 kDa
<b>Observed molecular weight</b>	120-130 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Measured by the ability of the immobilized protein to support the adhesion of C6 Rat brain glial cells. When $5 \times 10^4$ cells/well are added to CNTN3 coated plates (0.8 µg/ml and 100 µl/well), approximately 35%-55% will adhere specifically after 60 minutes at 37°C.

### Properties

<b>Purity</b>	> 97 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 97 % as determined by reducing SDS-PAGE.

### For Research Use Only

## 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-1; Contactin-2 (TAG-1); Contactin-3 (BIG-1); BIG-2; Contactin-5 (NB-2) and NB-3. Since their identification in the late 1980s; Contactin-1 and Contactin-2 have been studied extensively. 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-3; also known as CNTN3 ( BIG-1 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.

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