## Recombinant Rat Contactin 3/CNTN3 Protein (His Tag)

## Catalog Number: PKSR030239

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

Description		
Species	Rat	
Source	HEK293 Cells-derived Rat Contactin 3/CNTN3 protein Met1-Gly1001, with an C-	
	terminal His	
Calculated MW	109.2 kDa	
Observed MW	120 kDa	
Accession	Q62682	
Bio-activity	Not validated for activity	
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 $< -20^{\circ}C$ 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% Tween 80 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		
	KDa M	
	116	

116	_ =
66.2	-
45.0	-
35.0	-
25.0	-
18.4	-
14.4	-

> 95 % as determined by reducing SDS-PAGE.

## Background

## **Elabscience**®

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 have been studied extensively. Axonal expression and the neurite extension activity of Contactin-1 and Contactin-2 have come 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-lik e) 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.