## Recombinant Mouse NEGR1 Protein (His Tag)

## Catalog Number: PKSM040588

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

Description		
Species	Mouse	
Source	HEK293 Cells-derived Mouse NEGR1 protein Met 1-Gly 318, with an C-terminal His	
Calculated MW	33 kDa	
Observed MW	47 kDa	
Accession	NP_001034183.1	
Bio-activity	Not validated for activity	
Properties		
Purity	> 94 % 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	
	°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.	



KDa	MK	R	
116 66.2	-		
45.0 35.0	-		
25.0	-		
18.4	-		
14.4	-		
			1

> 94 % as determined by reducing SDS-PAGE.

## Background

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Neuronal Growth Regulator 1, NEGR1, also known as neurotractin, or KILON, which belongs to the immunoglobulin superfamily, IgLON family. This GPI-linked cell surface glycoprotein NEGR1 is composed of three Ig-like domains and belongs to the IgLON subgroup of neural IgSF members. It is expressed in two isoforms with apparent molecular masses of 50 and 37 kD, termed L-form and S-form, respectively. NEGR1/Neurotractin participates in the regulation of neurite outgrowth in the developing brain, and is expressed on neurites of primary hippocampal neurons. Neurotractin/KILON is a trans-neural growth-promoting factor for outgrowing axons following hippocampal denervation. KILON (kindred of IgLON) and opioid-binding cell adhesion molecule belong to the IgLON subgroup of immunoglobulin superfamily together with the limbic system-associated membrane protein and neurotrimin. The alteration of modulatory function of KILON/NEGR1 for the number of dendritic synapses concomitant with changes in its localization and detergent solubility during neuronal culture development. In addition to its reported role in the brain, NEGR1 is also expressed in subcutaneous adipose tissue and acts as a central 'hub' in an obesity-related transcript network.