

#### DESCRIPTION

**Source** Chinese Hamster Ovary cell line, CHO-derived human Netrin-G2 protein  
Asp18-Pro506, with a C-terminal 6-His tag  
Accession # Q96CW9.2

**N-terminal Sequence Analysis** Asp18

**Predicted Molecular Mass** 56 kDa

#### SPECIFICATIONS

**SDS-PAGE** 70-78 kDa, under reducing conditions

**Activity** Measured by its binding ability in a functional ELISA.  
When Recombinant Human Netrin-G2 His-Tag protein is coated at 1 µg/mL, Recombinant Human LRRC4 Fc Chimera (Catalog # 9375-LR) binds with an ED<sub>50</sub> of 1.5-9 ng/mL.

**Endotoxin Level** <0.10 EU per 1 µg of the protein by the LAL method.

**Purity** >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

**Formulation** Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

#### PREPARATION AND STORAGE

**Reconstitution** Reconstitute at 1 mg/mL in PBS.

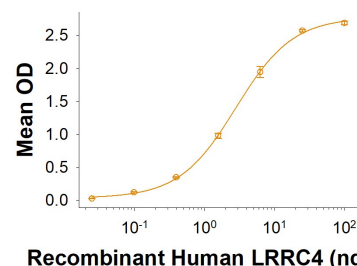
**Shipping** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

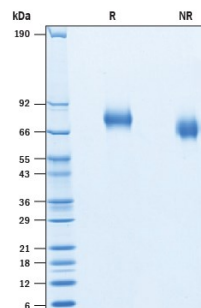
#### DATA

##### Binding Activity



When Recombinant Human Netrin-G2 His-Tag (Catalog # 10675-NG) is coated at 1 µg/mL, Recombinant Human LRRC4 Fc Chimera (Catalog # 9375-LR) binds with an ED<sub>50</sub> of 1.5-9 ng/mL.

##### SDS-PAGE



2 µg/lane of Recombinant Human Netrin-G2 His-tag (Catalog # 10675-NG) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 70-78 kDa.

#### BACKGROUND

NTNG-2 (Netrin-G2) is a member of a GPI-linked Netrin subfamily that is distantly related to classical Netrins. Mature human Netrin-G2 is approximately 490 amino acid (aa) in length. It contains an N-terminal laminin-related region, several epidermal-growth-factor-like domains and a heparin-binding C-terminus that ends in a GPI-linkage (1). The laminin-related region shows a globular type VI domain followed by three variable-length EGF-like domains. Mature human Netrin-G2 shares 96% aa identity with mouse and rat Netrin-G2. NTNG-2 is predominantly expressed in specific neuronal subsets of the developing and mature central nervous system (2). The protein interacts with the extracellular region of their specific Netrin-G ligand receptors LRRC4 (3). The netrin family proteins provide axonal guidance cues during central nervous system development (4).

#### References:

1. Seiradake E. *et al.* (2011) The EMBO J. **30**:4479.
2. Pirone A. *et al.* (2012) PLOS **7**(9):e44745.
3. Woo, J. *et al.* Mol. Cell Neurosci. (2009) **42**:1.
4. Zhang, Q. *et al.* (2005) FEBS Lett. **579**:3674.