Recombinant Human LRRN4 His-tag

Catalog Number: 10227-LR

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived human LRRN4 protein Asp19-Ser679, with a C-terminal 6-His tag Accession # Q8WUT4
Predicted Molecular Mass	71 kDa

SPECIFICATIONS

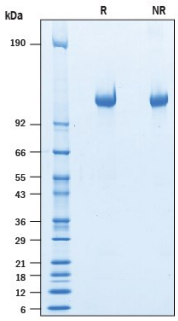
SDS-PAGE	106-123 kDa, under reducing conditions
Activity	Bioassay data are not available.
Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/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

SDS-PAGE



Recombinant Human LRRN4 His-tag Protein SDS-PAGE 2 µg/lane of Recombinant Human LRRN4 His-tag (Catalog # 10227-LR) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 106-123 kDa.

BACKGROUND

LRRN4 (Leucine-rich repeat neuronal protein 4) is a type I transmembrane protein that is a member of the LRRN family. It is expressed in lung, heart, ovary, and neuronal tissues (1-3). Mature human LRRN4 is composed of a 661 amino acid (aa) extracellular domain (ECD) that includes 10 LRRs and a fibronectin type III-like domain, a 21 aa transmembrane segment, and a 40 aa cytoplasmic domain. Within the ECD, human LRRN4 shares 66% and 64% aa sequence identity with mouse and rat LRRN4, respectively. LRRN-4-deficient mice show defects in the memory retention, suggesting this protein may be involved in memory retention (4). In addition, LRRN4 is found in about 8% dorsal root ganglion (DEG) neurons (2). These neurons are small-sized neurons that function as nociceptors. LRRN4 expression was decreased in the DRG by sciatic axotomy suggesting that LRRN4 might function as a synaptic adhesion molecule to maintain nociceptive circuits (2). LRRN4 is also expressed in primary mesothelial cells and may be developed as a marker for detection of mesothelioma antigens (5).

References:

1. Bando, T. *et al.* (2005) Mol. Cell. Biol. **25**:4166.
2. Bando, T. *et al.* (2012) Neurosci. Lett. **531**:24.
3. Bando, T. *et al.* (2013) Neurosci. Lett. **548**:73.
4. Bando, T. *et al.* (1995) Mol. Cellular. Biol. **25**:4166.
5. Kanamori-Katayama, M. (2011) PloS. One. **6**:e24391.

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