

Lingo-2 (Q-14): sc-164869

BACKGROUND

Lingo-2 (leucine-rich repeat and immunoglobulin-like domain-containing nogo receptor-interacting protein 2), also known as LERN3 (leucine-rich repeat neuronal protein 3) or LRRN6C, is a 606 amino acid single-pass type I membrane protein. Lingo-2 contains one immunoglobulin-like C2-type domain and 13 leucine-rich repeats. Lingo-2 is a member of the LRR gene family and has been linked to essential tremor and Parkinson's disease. Lingo-2 has a high degree of homology (61%) with Lingo-1, a regulator of neuronal death, and the expression of Lingo-2 seems to be restricted to neuronal tissue.

REFERENCES

1. Trifunovski, A., Josephson, A., Ringman, A., Brené, S., Spenger, C. and Olson, L. 2004. Neuronal activity-induced regulation of Lingo-1. *Neuroreport* 15: 2397-2400.
2. Haines, B.P. and Rigby, P.W. 2008. Expression of the Lingo/LERN gene family during mouse embryogenesis. *Gene Expr. Patterns* 8: 79-86.
3. Benito-León, J., Louis, E.D. and Bermejo-Pareja, F. 2009. Risk of incident Parkinson's disease and parkinsonism in essential tremor: a population based study. *J. Neurol. Neurosurg. Psychiatr.* 80: 423-425.
4. Tan, E.K., Teo, Y.Y., Prakash, K.M., Li, R., Lim, H.Q., Angeles, D., Tan, L.C., Au, W.L., Yih, Y. and Zhao, Y. 2009. LINGO1 variant increases risk of fami-lial essential tremor. *Neurology* 73: 1161-1162.
5. Clark, L.N., Park, N., Kisselev, S., Rios, E., Lee, J.H. and Louis, E.D. 2010. Replication of the LINGO1 gene association with essential tremor in a North American population. *Eur. J. Hum. Genet.* 18: 838-843.
6. Vilariño-Güell, C., Wider, C., Ross, O.A., Jasinska-Myga, B., Kachergus, J., Cobb, S.A., Soto-Ortolaza, A.I., Behrouz, B., Heckman, M.G., Diehl, N.N., Testa, C.M., Wszolek, Z.K., Uitti, R.J., Jankovic, J., Louis, E.D., et al. 2010. LINGO1 and LINGO2 variants are associated with essential tremor and Parkinson disease. *Neurogenetics* 11: 401-408.

CHROMOSOMAL LOCATION

Genetic locus: LINGO2 (human) mapping to 9p21.2; Lingo2 (mouse) mapping to 4 A5.

SOURCE

Lingo-2 (Q-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of Lingo-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-164869 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Lingo-2 (Q-14) is recommended for detection of Lingo-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Lingo family members.

Lingo-2 (Q-14) is also recommended for detection of Lingo-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Lingo-2 siRNA (h): sc-92529, Lingo-2 siRNA (m): sc-146735, Lingo-2 shRNA Plasmid (h): sc-92529-SH, Lingo-2 shRNA Plasmid (m): sc-146735-SH, Lingo-2 shRNA (h) Lentiviral Particles: sc-92529-V and Lingo-2 shRNA (m) Lentiviral Particles: sc-146735-V.

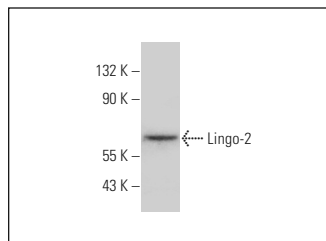
Molecular Weight of Lingo-2: 68 kDa.

Positive Control: SH-SY5Y cell lysate: sc-3812.

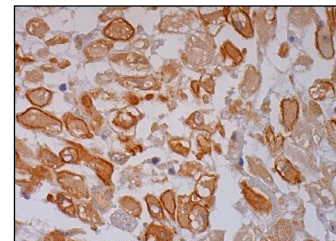
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Lingo-2 (Q-14): sc-164869. Western blot analysis of Lingo-2 expression in SH-SY5Y whole cell lysate.



Lingo-2 (Q-14): sc-164869. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing membrane and cytoplasmic staining of decidual cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.