

# Lingo-4 (E-15): sc-164871

## BACKGROUND

Lingo-4 (leucine-rich repeat and immunoglobulin-like domain-containing nogo receptor-interacting protein 4), also known as LRRN6D (leucine-rich repeat neuronal protein 6D), is a 593 amino acid single-pass type I membrane protein that contains eleven LRR (leucine-rich) repeats, one Ig-like C2-type (immunoglobulin-like) domain, one LRRCT domain and one LRRNT domain. The gene that encodes Lingo-4 consists of approximately 5,891 bases and maps to human chromosome 1q21.3. Comprising nearly 8% of the human genome, chromosome 1 spans 260 million base pairs, contains over 3,000 genes and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

## REFERENCES

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3. Bowling, E.L., et al. 2000. The Stickler syndrome: case reports and literature review. *Optometry* 71: 177-182.
4. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. *Mol. Genet. Metab.* 73: 313-321.
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## CHROMOSOMAL LOCATION

Genetic locus: LINGO4 (human) mapping to 1q21.3; Lingo4 (mouse) mapping to 3 F2.1.

## SOURCE

Lingo-4 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of Lingo-4 of human origin.

## RESEARCH USE

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

## 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-164871 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Lingo-4 (E-15) is recommended for detection of Lingo-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (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-4 (E-15) is also recommended for detection of Lingo-4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Lingo-4 siRNA (h): sc-88271, Lingo-4 siRNA (m): sc-146737, Lingo-4 shRNA Plasmid (h): sc-88271-SH, Lingo-4 shRNA Plasmid (m): sc-146737-SH, Lingo-4 shRNA (h) Lentiviral Particles: sc-88271-V and Lingo-4 shRNA (m) Lentiviral Particles: sc-146737-V.

Molecular Weight of Lingo-4: 64 kDa.

## 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) 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.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.