

# C10orf27 (P-14): sc-163769

## BACKGROUND

C10orf27 (chromosome 10 open reading frame 27), also known as spatial, is a 351 amino acid cytoplasmic protein belonging to the spatial family. C10orf27 is suggested to play a role in spermatid differentiation. Existing as two alternatively spliced isoforms, C10orf27 is widely expressed in multiple tissues, including brain, thymus and testis. C10orf27 may be associated with multiple sclerosis (MS) susceptibility and pathogenesis. MS is an inflammatory disease that causes gradual destruction of myelin in the central nervous system. C10orf27 is encoded by a gene located on human chromosome 10, which contains over 800 genes and 135 million nucleotides, making up nearly 4.5% of the human genome. PTEN is an important tumor suppressor gene located on chromosome 10 and, when defective, causes a genetic predisposition to cancer development known as Cowden syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: C10orf27 (human) mapping to 10q22.1; Tbeta (mouse) mapping to 10 B4.

## SOURCE

C10orf27 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C10orf27 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-163769 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

C10orf27 (P-14) is recommended for detection of C10orf27 of human origin and Spatial of mouse 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 C10orf family members.

C10orf27 (P-14) is also recommended for detection of C10orf27 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for C10orf27 siRNA (h): sc-90763, Spatial siRNA (m): sc-153727, C10orf27 shRNA Plasmid (h): sc-90763-SH, Spatial shRNA Plasmid (m): sc-153727-SH, C10orf27 shRNA (h) Lentiviral Particles: sc-90763-V and Spatial shRNA (m) Lentiviral Particles: sc-153727-V.

Molecular Weight of C10orf27 isoforms 1/2: 39/28 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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.

## RESEARCH USE

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

## PROTOCOLS

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