

# NSP3 (M-15): sc-11696

## BACKGROUND

The Eph family of receptor tyrosine kinases has been implicated in many developmental patterning processes, including cell segregation, cell migration, and axon guidance. An intermediate that is involved in the signaling pathways of the Eph receptors is novel SH2-containing protein 3 (NSP3, also designated SH2 domain-containing Eph receptor-binding protein 1, SHEP1, Cas, or HEF1 associated signal transducer), expressed in both the embryonic and adult brain. NSP3 contains a Src homology 2 domain that binds to a conserved tyrosine-phosphorylated motif in the juxtamembrane region of the EphB2 receptor. NSP3 may itself be a target of EphB2 kinase activity since it becomes heavily tyrosine-phosphorylated in cells expressing activated EphB2. NSP3 directly links activated, tyrosine-phosphorylated Eph receptors to small Ras superfamily GTPases.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SH2D3C (human) mapping to 9q34.11; Sh2d3c (mouse) mapping to 2 B.

## SOURCE

NSP3 (M-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NSP3 of mouse origin.

## STORAGE

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

## 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-11696 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NSP3 (M-15) is recommended for detection of NSP3 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).

NSP3 (M-15) is also recommended for detection of NSP3 in additional species, including bovine.

Suitable for use as control antibody for NSP3 siRNA (h): sc-44855, NSP3 siRNA (m): sc-44856, NSP3 shRNA Plasmid (h): sc-44855-SH, NSP3 shRNA Plasmid (m): sc-44856-SH, NSP3 shRNA (h) Lentiviral Particles: sc-44855-V and NSP3 shRNA (m) Lentiviral Particles: sc-44856-V.

Molecular Weight of NSP3: 94 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

## 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.

## RESEARCH USE

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

## PROTOCOLS

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Try **NSP3 (J-16.1): sc-100792**, our highly recommended monoclonal alternative to NSP3 (M-15).