TPR (H-300): sc-67116



The Power to Question

BACKGROUND

The vertebrate nuclear pore complex (NPC) is a macromolecular assembly of protein subcomplexes forming a structure of eightfold radial symmetry. The NPC core consists of globular subunits sandwiched between two coaxial ring-like structures of which the ring facing the nuclear interior is capped by a fibrous structure called the nuclear basket. The assembly of the NPC is a stepwise process in which TPR-containing peripheral structures assemble after other components, including p62. TPR localizes to intranuclear filaments of the NPC and is a component of the cytoplasmic fibrils of the NPC implicated in nuclear protein import. Experimental data suggest that TPR is tethered to intranuclear filaments of the NPC by its coiled-coil domain, leaving the acidic COOH terminus free to interact with soluble transport factors and mediate export of macromolecules from the nucleus.

CHROMOSOMAL LOCATION

Genetic locus: TPR (human) mapping to 1q31.1; Tpr (mouse) mapping to 1 G1.

SOURCE

TPR (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of TPR of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

TPR (H-300) is recommended for detection of translocated promoter region of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffinembedded 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).

TPR (H-300) is also recommended for detection of translocated promoter region in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TPR siRNA (h): sc-45343, TPR siRNA (m): sc-45344, TPR shRNA Plasmid (h): sc-45343-SH, TPR shRNA Plasmid (m): sc-45344-SH, TPR shRNA (h) Lentiviral Particles: sc-45343-V and TPR shRNA (m) Lentiviral Particles: sc-45344-V.

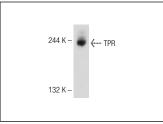
Molecular Weight of TPR: 265-270 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or SK-N-MC cell lysate: sc-2237.

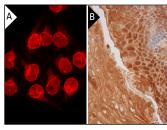
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



TPR (H-300): sc-67116. Western blot analysis of TPR expression in SK-N-MC whole cell lysate.



TTPR (H-300): sc-67116. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear envelope localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing nuclear and cytoplasmic staining of squamous epithelial cells (B).

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **TPR (H-8):** sc-271565 or **TPR (H-12):** sc-271317, our highly recommended monoclonal aternatives to TPR (H-300).

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