

NR2E3 (H-61): sc-292264

BACKGROUND

Photoreceptor-specific nuclear receptor, also known as NR2E3 or PNR, belongs to a large family of nuclear hormone receptor transcription factors. The proteins belonging to this family are characterized by discrete domains functioning in DNA and ligand binding. NR2E3 has a role in regulating the signaling pathway elemental to the photoreceptor cell function and in regulating pathways involved in embryonic development. NR2E3 is an eye specific nuclear protein found in the outer nuclear layer of the adult retina (where the nuclei of cone and rod photoreceptors are located). Defects in this gene encoding for the protein, which localizes to chromosome 15q23, cause enhanced S cone syndrome.

REFERENCES

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4. Akhmedov, N.B., et al. 2000. A deletion in a photoreceptor-specific nuclear receptor mRNA causes retinal degeneration in the rd7 mouse. *Proc. Natl. Acad. Sci. USA* 97: 5551-5556.
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8. Bumsted O'Brien, K.M., et al. 2004. Expression of photoreceptor-specific nuclear receptor NR2E3 in rod photoreceptors of fetal human retina. *Invest. Ophthalmol. Vis. Sci.* 45: 2807-2812.
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CHROMOSOMAL LOCATION

Genetic locus: NR2E3 (human) mapping to 15q23; Nr2e3 (mouse) mapping to 9 B.

SOURCE

NR2E3 (H-61) is a rabbit polyclonal antibody raised against amino acids 164-224 mapping within an internal region of NR2E3 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-292264 X, 200 µg/0.1 ml.

APPLICATIONS

NR2E3 (H-61) is recommended for detection of NR2E3 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NR2E3 (H-61) is also recommended for detection of NR2E3 in additional species, including equine.

Suitable for use as control antibody for NR2E3 siRNA (h): sc-45726, NR2E3 siRNA (m): sc-45727, NR2E3 shRNA Plasmid (h): sc-45726-SH, NR2E3 shRNA Plasmid (m): sc-45727-SH, NR2E3 shRNA (h) Lentiviral Particles: sc-45726-V and NR2E3 shRNA (m) Lentiviral Particles: sc-45727-V.

NR2E3 (H-61) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NR2E3: 42 kDa.

Positive Controls: retina extract.

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.

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.



Try **NR2E3 (B-4): sc-374513**, our highly recommended monoclonal alternative to NR2E3 (H-61).