**BACKGROUND**

Interphotoreceptor retinoid-binding protein (IRBP) is a retinoid and fatty acid binding protein expressed exclusively in the photoreceptor cells of the retina and pinealocytes of the pineal gland. The gene encoding human IRBP maps to chromosome 10q11.2. A putative trans-acting complex binds a cis-element in the IRBP promoter and fully activates transcription of the IRBP gene. Hypomethylation of cysteine residues in the IRBP promoters of bovine and murine photoreceptor cells permits expression of the IRBP gene. IRBP may be involved in shuttling retinoids between photoreceptors and the retinal pigment epithelium. IRBP exists as a glycoprotein with a four-fold repeat structure. Each 300 amino acid repeat contains one A and one B domain corresponding to the first 80 amino acids (A) and the other 220 amino acids (B) (9,10). Along with S-antigen and opsin, the antigenic properties of IRBP induce posterior uveitis, which is characterized by the inflammation of the choroid and photoreceptor cell death (11,12).

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: RBP3 (human) mapping to 10q11.22; Rbp3 (mouse) mapping to 14 B.

**SOURCE**

IRBP (H-300) is a rabbit polyclonal antibody raised against amino acids 948-1247 mapping at the C-terminus of IRBP 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.

**RESEARCH USE**

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

**APPLICATIONS**

IRBP (H-300) is recommended for detection of precursor and mature IRBP 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 lystate)), 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).

Suitable for use as control antibody for IRBP siRNA (h): sc-40703, IRBP siRNA (m): sc-40704, IRBP shRNA Plasmid (h): sc-40703-SH, IRBP shRNA Plasmid (m): sc-40704-SH, IRBP siRNA (h) Lentiviral Particles: sc-40703-V and IRBP shRNA (m) Lentiviral Particles: sc-40704-V.

Molecular Weight of IRBP: 140 kDa.

Positive Controls: IRBP (m): 293T Lysate : sc-121105, mouse eye extract: sc-364241 or IRBP (m3): 293T Lysate : sc-121107.

**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.

**DATA**

**STORAGE**

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

**MONOS Satisfaction Guaranteed**

Try IRBP (A-12): sc-376225 or IRBP (H-6): sc-390218, our highly recommended monoclonal alternatives to IRBP (H-300).