

βB2-crystallin (P-20): sc-22409

BACKGROUND

Crystallins are the major proteins of the vertebrate eye lens, where they maintain the transparency and refractive index of the lens. Crystallins are divided into α , β , and γ families, and the β - and γ -crystallins also comprise a superfamily. Crystallins usually contain seven distinctive protein regions, including four homologous motifs, a connecting peptide, and N- and C-terminal extensions. β -crystallins constitute the major lens structural proteins, and they associate into dimers, tetramers, and higher order aggregates. The β -crystallin subfamily is composed of several gene products, including β A1-, β A2-, β A3-, β A4-, β B1-, β B2- and β B3-crystallin. The β A1- and β A3-crystallin proteins are encoded by a single mRNA. They differ by only 17 amino acids, and β A1-crystallin is generated by use of an alternate translation initiation site.

CHROMOSOMAL LOCATION

Genetic locus: CRYBB2 (human) mapping to 22q11.23; Crybb2 (mouse) mapping to 5 F.

SOURCE

βB2-crystallin (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of βB2-crystallin 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-22409 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

βB2-crystallin (P-20) is recommended for detection of βB2-crystallin 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).

βB2-crystallin (P-20) is also recommended for detection of βB2-crystallin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for βB2-crystallin siRNA (h): sc-40444, βB2-crystallin siRNA (m): sc-40445, βB2-crystallin shRNA Plasmid (h): sc-40444-SH, βB2-crystallin shRNA Plasmid (m): sc-40445-SH, βB2-crystallin shRNA (h) Lentiviral Particles: sc-40444-V and βB2-crystallin shRNA (m) Lentiviral Particles: sc-40445-V.

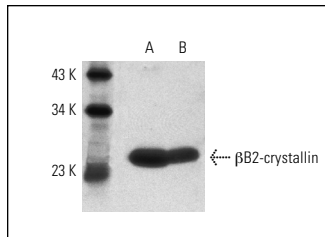
Molecular Weight of βB2-crystallin: 24 kDa.

Positive Controls: mouse eye tissue extract or rat eye tissue extract.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



βB2-crystallin (P-20): sc-22409. Western blot analysis of βB2-crystallin expression in rat eye (A) and mouse eye (B) tissue extracts.

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.

MONOS
Satisfaction
Guaranteed

Try **βB2-crystallin (B-12): sc-376006** or **βB2-crystallin (D-1): sc-376856**, our highly recommended monoclonal alternatives to βB2-crystallin (P-20).