



γ B-crystallin (G-12): sc-79247

BACKGROUND

Crystallins, the major proteins of the vertebrate eye lens, are responsible for maintaining the transparency and the refractive index of the lens. Crystallins are divided into α , β , and γ families, all of which usually contain seven distinctive protein regions, including four homologous motifs, one connecting peptide and N- and C-terminal extensions. The γ -crystallin family is comprised of seven closely related proteins designated γ A-, γ B-, γ C-, γ D-, γ E-, γ F- and γ G-crystallin. γ B-crystallin, also known as CRYGB or CRYG2, is a 175 amino acid member of the γ -crystallin family. Functioning as a monomer that has a two-domain beta fold, γ B-crystallin, like other members of its family, plays a key role in ensuring the proper structure of the vertebrate eye lens. Defects in the gene encoding γ B-crystallin are associated with the formation of cataracts which are characterized by a clouding of the crystalline lens of the eye.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Crygb (mouse) mapping to 1 C2.

SOURCE

γ B-crystallin (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of γ B-crystallin of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79247 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

γ B-crystallin (G-12) is recommended for detection of γ B-crystallin of mouse and rat 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).

Suitable for use as control antibody for γ B-crystallin siRNA (m): sc-40453, γ B-crystallin shRNA Plasmid (m): sc-40453-SH and γ B-crystallin shRNA (m) Lentiviral Particles: sc-40453-V.

Molecular Weight of γ B-crystallin: 21 kDa.

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.

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.

PROTOCOLS

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