

BBS10 (E-15): sc-82532

BACKGROUND

Bardet-Biedl syndrome (BBS) is a pleiotropic genetic disorder characterized by obesity, photoreceptor degeneration, polydactyly, hypogonadism, renal abnormalities, and developmental delay. Other associated clinical findings in BBS patients include diabetes, hypertension, and congenital heart defects. BBS genes map to multiple loci and encode fourteen proteins, BBS1-BBS14. Many BBS genes encode basal body or cilia proteins, suggesting that BBS is a ciliary dysfunction disorder. BBS10 (Bardet-Biedl syndrome 10), also known as chromosome 12 open reading frame 58, C12orf58 or FLJ23560, is a novel 723 amino acid protein belonging to the TCP-1 chaperonin family. BBS10 localizes to the basal body of primary cilium and assists in protein folding upon ATP hydrolysis. Inhibition of BBS10 has been found to impair ciliogenesis, activate the glycogen synthase kinase 3 pathway and cause peroxisome proliferator-activated receptor nuclear accumulation. The gene encoding BBS10 contains two exons and maps to human chromosome 12q21.2.

REFERENCES

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- Gerth, C., et al. 2008. Retinal morphology in patients with BBS1 and BBS10 related Bardet-Biedl Syndrome evaluated by Fourier-domain optical coherence tomography. *Vision Res.* 48: 392-399.
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CHROMOSOMAL LOCATION

Genetic locus: BBS10 (human) mapping to 12q21.2; Bbs10 (mouse) mapping to 10 D1.

SOURCE

BBS10 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BBS10 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-82532 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BBS10 (E-15) is recommended for detection of BBS10 of mouse 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); non cross-reactive with other BBS family members.

BBS10 (E-15) is also recommended for detection of BBS10 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BBS10 siRNA (h): sc-72620, BBS10 siRNA (m): sc-72621, BBS10 shRNA Plasmid (h): sc-72620-SH, BBS10 shRNA Plasmid (m): sc-72621-SH, BBS10 shRNA (h) Lentiviral Particles: sc-72620-V and BBS10 shRNA (m) Lentiviral Particles: sc-72621-V.

Molecular Weight of BBS10: 81 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) 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.

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.