

WIBG (V-14): sc-169813

BACKGROUND

The exon junction complex (EJC) is a multi-protein complex that associates upstream of the exon-exon junction on mRNAs. The EJC serves as a positional indicator for the intron-exon structure of genes and directs post-transcriptional processes in the cytoplasm such as mRNA export, nonsense-mediated mRNA decay (NMD) or translation. WIBG (within bgn homolog (*Drosophila*)), also known as PYM (partner of 14 and mago), is a 204 amino acid cytoplasmic and nuclear protein that acts as a key regulator of the EJC. Belonging to the WIBG family, WIBG functions as a EJC disassembly factor as it disrupts mature EJC from spliced mRNAs, thereby enabling translation-dependent EJC removal and recycling. As an antagonist of EJC activity, WIBG interferes with NMD and enhances translation of mRNAs. WIBG interaction with the 40S ribosomal subunit likely prevents translation-independent disassembly of the EJC from spliced mRNAs and restricts its activity from translated mRNAs. WIBG exists as two alternatively spliced isoforms and is encoded by a gene located on human chromosome 12q13.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: WIBG (human) mapping to 12q13.2; Wibg (mouse) mapping to 10 D3.

RESEARCH USE

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

SOURCE

WIBG (V-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of WIBG 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-169813 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WIBG (V-14) is recommended for detection of WIBG of mouse, rat and human 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).

WIBG (V-14) is also recommended for detection of WIBG in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for WIBG siRNA (h): sc-96076, WIBG siRNA (m): sc-155348, WIBG shRNA Plasmid (h): sc-96076-SH, WIBG shRNA Plasmid (m): sc-155348-SH, WIBG shRNA (h) Lentiviral Particles: sc-96076-V and WIBG shRNA (m) Lentiviral Particles: sc-155348-V.

Molecular Weight of WIBG: 29 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.

PROTOCOLS

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