

## WIBG Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10709a

#### Specification

## WIBG Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>O9BRP8</u> <u>O8CHP5</u>, <u>A6OPH1</u>, <u>NP\_115721.1</u> Human Bovine, Mouse Rabbit Polyclonal Rabbit IgG 22656 12-40

## WIBG Antibody (N-term) - Additional Information

Gene ID 84305

Other Names Partner of Y14 and mago, Protein wibg homolog, WIBG, PYM

#### Target/Specificity

This WIBG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-40 amino acids from the N-terminal region of human WIBG.

**Dilution** WB~~1:1000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

WIBG Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## WIBG Antibody (N-term) - Protein Information

Name PYM1 (<u>HGNC:30258</u>)



## Synonyms PYM, WIBG

**Function** Key regulator of the exon junction complex (EJC), a multiprotein complex that associates immediately upstream of the exon- exon junction on mRNAs and serves as a positional landmark 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. Acts as an EJC disassembly factor, allowing translation-dependent EJC removal and recycling by disrupting mature EJC from spliced mRNAs. Its association with the 40S ribosomal subunit probably prevents a translation-independent disassembly of the EJC from spliced mRNAs, by restricting its activity to mRNAs that have been translated. Interferes with NMD and enhances translation of spliced mRNAs, probably by antagonizing EJC functions. May bind RNA; the relevance of RNA-binding remains unclear in vivo, RNA-binding was detected by PubMed:<u>14968132</u>, while PubMed:<u>19410547</u> did not detect RNA- binding activity independently of the EJC.

#### **Cellular Location**

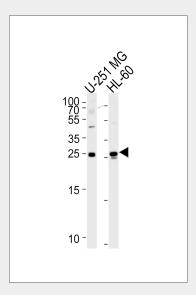
Cytoplasm. Nucleus, nucleolus. Nucleus, nucleoplasm. Note=Shuttles between the nucleus and the cytoplasm (PubMed:14968132). Nuclear export is mediated by XPO1/CRM1 (PubMed:14968132).

## WIBG Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

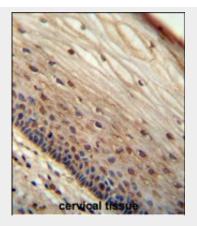
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## WIBG Antibody (N-term) - Images



Western blot analysis of lysates from U-251 MG, HL-60 cell line (from left to right), using WIBG Antibody (N-term)(Cat. #AP10709a). AP10709a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.





WIBG antibody (N-term) (Cat. #AP10709a) immunohistochemistry analysis in formalin fixed and paraffin embedded human cervical tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the WIBG antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

## WIBG Antibody (N-term) - Background

Key regulator of the exon junction complex (EJC), a multiprotein complex that associates immediately upstream of the exon-exon junction on mRNAs and serves as a positional landmarks 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. Acts as a EJC disassembly factor, allowing translation-dependent EJC removal and recycling by disrupting mature EJC from spliced mRNAs. Its association with the 40S ribosomal subunit probably prevents a translation-independent disassembly of the EJC from spliced mRNAs, by restricting its activity to mRNAs that have been translated. Interferes with NMD and enhances translation of spliced mRNAs, probably by antagonizing EJC functions. May bind RNA; the relevance of RNA-binding remains unclear in vivo, RNA-binding was detected by PubMed:14968132, while PubMed:19410547 did not detect RNA-binding activity independently of the EJC.

# WIBG Antibody (N-term) - References

Gehring, N.H., et al. Cell 137(3):536-548(2009) Diem, M.D., et al. Nat. Struct. Mol. Biol. 14(12):1173-1179(2007) Forler, D., et al. Nat. Biotechnol. 21(1):89-92(2003) Gatfield, D., et al. J. Cell Biol. 159(4):579-588(2002)