

# WIBG Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10709a

#### **Product Information**

Application IHC-P, WB, E Primary Accession Q9BRP8

Other Accession <u>Q8CHP5</u>, <u>A6QPH1</u>, <u>NP 115721.1</u>

Reactivity Human **Predicted** Bovine Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB28144 **Calculated MW** 22656 **Antigen Region** 12-40

#### **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** IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.

**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.

#### **Protein Information**

Name PYM1 ( HGNC:30258)

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:14968132, while PubMed:19410547 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).

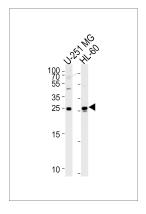
### **Background**

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.

#### References

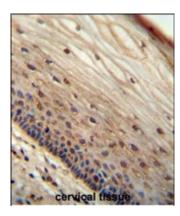
Gehring, N.H., et al. Cell 137(3):536-548(2009)
Diem, M.D., et al. Nat. Struct. Mol. Biol. 14(12):1173-1179(2007)
Forler, D., et al. Nat. Biotechnol. 21(1):89-92(2003)
Gatfield, D., et al. J. Cell Biol. 159(4):579-588(2002)

## **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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.