

# BAT1 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # AI10971

## **Product Information**

Application	WB
Primary Accession	<u>Q13838</u>
Other Accession	<u>NM_080598</u> , <u>NP_542165</u>
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Dog, Horse, Bovine
Predicted	Human, Zebrafish, Goat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48991

# **Additional Information**

Gene ID	7919
Alias Symbol Other Names	BAT1, UAP56, D6S81E Spliceosome RNA helicase DDX39B, 3.6.4.13, 56 kDa U2AF65-associated protein, ATP-dependent RNA helicase p47, DEAD box protein UAP56, HLA-B-associated transcript 1 protein, DDX39B, BAT1, UAP56
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-BAT1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	BAT1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

### **Protein Information**

Name	DDX39B ( <u>HGNC:13917</u> )
Synonyms	BAT1, UAP56
Function	Involved in nuclear export of spliced and unspliced mRNA (PubMed: <u>15833825</u> , PubMed: <u>15998806</u> , PubMed: <u>17190602</u> ). Component of the TREX complex which is thought to couple mRNA transcription, processing and nuclear export, and specifically associates with spliced mRNA and not with unspliced pre-mRNA (PubMed: <u>15833825</u> , PubMed: <u>15998806</u> , PubMed: <u>17190602</u> ). The TREX complex is recruited to spliced mRNAs by a transcription-independent mechanism, binds to mRNA upstream of the

exon-junction complex (EJC) and is recruited in a splicing- and cap- dependent manner to a region near the 5' end of the mRNA where it functions in mRNA export to the cytoplasm via the TAP/NXF1 pathway (PubMed: 15833825, PubMed:15998806, PubMed:17190602). The THOC1-THOC2- THOC3 core complex alone is sufficient to promote ATPase activity of DDX39B; in the complex THOC2 is the only component that directly interacts with DDX39B (PubMed:<u>33191911</u>). Associates with SARNP/CIP29, which facilitates RNA binding of DDX39B and likely plays a role in mRNA export (PubMed:<u>37578863</u>). May undergo several rounds of ATP hydrolysis during assembly of TREX to drive subsequent loading of components such as ALYREF/THOC4 and CHTOP onto mRNA. Also associates with pre-mRNA independent of ALYREF/THOC4. Involved in the nuclear export of intronless mRNA; the ATP-bound form is proposed to recruit export adapter ALYREF/THOC4 to intronless mRNA; its ATPase activity is cooperatively stimulated by RNA and ALYREF/THOC4 and ATP hydrolysis is thought to trigger the dissociation from RNA to allow the association of ALYREF/THOC4 and the NXF1-NXT1 heterodimer. Involved in transcription elongation and genome stability.

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Cellular LocationNucleus. Nucleus speckle. Cytoplasm. Note=Can translocate to the cytoplasm<br/>in the presence of MX1. TREX complex assembly seems to occur in regions<br/>surrounding nuclear speckles known as perispeckles
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#### References

Allcock,R.J., et al., (2001) Genes Cells 6 (5), 487-494Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.Publications:Bouley, J. et al. Proteomic analysis of BRCA1-depleted cell line reveals a putative role for replication protein A2 up-regulation in BRCA1 breast tumor development. Proteomics. Clin. Appl. 4, 489-98 (2010). WB, Human, Pig, Mouse, Dog, H, Goat, Rabbit, Rat, Guinea pig, Bovine, Zebrafish21137066

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