

Anti-Aly Rabbit Monoclonal Antibody

Catalog # ABO15648

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	Q86V81
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Aly Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	10189
Other Names	THO complex subunit 4, Tho4, Ally of AML-1 and LEF-1, Aly/REF export factor, Transcriptional coactivator Aly/REF, bZIP-enhancing factor BEF, ALYREF, ALY, BEF, THOC4
Calculated MW	26888
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:40 FC 1:100
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 22A24
Immunogen	A synthesized peptide derived from human Aly
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	ALYREF
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Synonyms

ALY, BEF, THOC4

Function

Functions as an mRNA export adapter; component of the transcription/export (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:[15833825](#), PubMed:[15998806](#), PubMed:[17190602](#)). TREX 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](#)). Involved in the nuclear export of intronless mRNA; proposed to be recruited to intronless mRNA by ATP-bound DDX39B (PubMed:[17984224](#)). Plays a key role in mRNP recognition and mRNA packaging by bridging the mRNP-bound EJC and the TREX core complex (PubMed:[37020021](#)). TREX recruitment occurs via an interaction between ALYREF/THOC4 and the cap-binding protein NCBP1 (PubMed:[15833825](#), PubMed:[15998806](#), PubMed:[17190602](#), PubMed:[37020021](#)). Required for TREX complex assembly and for linking DDX39B to the cap-binding complex (CBC) (PubMed:[15998806](#), PubMed:[17984224](#), PubMed:[37020021](#)). Binds mRNA which is thought to be transferred to the NXF1-NXT1 heterodimer for export (TAP/NXF1 pathway) (PubMed:[11675789](#), PubMed:[11707413](#), PubMed:[11979277](#), PubMed:[15833825](#), PubMed:[15998806](#), PubMed:[17190602](#), PubMed:[18364396](#), PubMed:[22144908](#), PubMed:[22893130](#), PubMed:[23222130](#), PubMed:[25662211](#)). In conjunction with THOC5 functions in NXF1-NXT1 mediated nuclear export of HSP70 mRNA; both proteins enhance the RNA binding activity of NXF1 and are required for NXF1 localization to the nuclear rim (PubMed:[19165146](#)). Involved in mRNA export of C5-methylcytosine (m5C)-containing mRNAs: specifically recognizes and binds m5C mRNAs and mediates their nucleo-cytoplasmic shuttling (PubMed:[28418038](#)). Acts as a chaperone and promotes the dimerization of transcription factors containing basic leucine zipper (bZIP) domains and thereby promotes transcriptional activation (PubMed:[10488337](#)). Involved in transcription elongation and genome stability (PubMed:[12438613](#)).

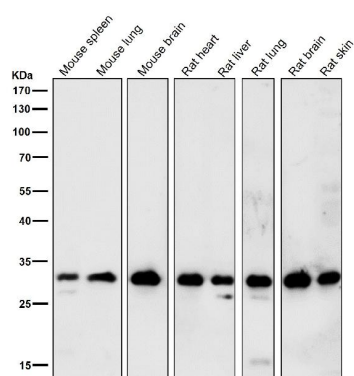
Cellular Location

Nucleus. Nucleus speckle Cytoplasm Note=Colocalizes with the core EJC, NXF1 and DDX39B in the nucleus and nuclear speckles. Travels to the cytoplasm as part of the exon junction complex (EJC) bound to mRNA (PubMed:[19324961](#)). Localizes to regions surrounding nuclear speckles known as perispeckles in which TREX complex assembly seems to occur (PubMed:[23826332](#))

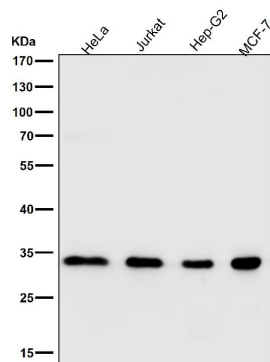
Tissue Location

Expressed in a wide variety of cancer types.

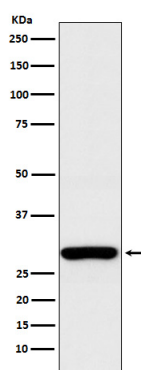
Images



All lanes use the Antibody at 1:1W dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1W dilution for 1 hour at room temperature.



Western blot analysis of Aly expression in HEK293 cell lysate.

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