

# Aly Rabbit mAb

Catalog # AP78193

## Product Information

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<b>Application</b>	WB, IHC-P, IF, FC, ICC, IP
<b>Primary Accession</b>	<a href="#">Q86V81</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal Antibody
<b>Isotype</b>	IgG
<b>Conjugate</b>	Unconjugated
<b>Immunogen</b>	A synthesized peptide derived from human Aly
<b>Purification</b>	Affinity Purified
<b>Calculated MW</b>	26888

## Additional Information

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<b>Gene ID</b>	10189
<b>Other Names</b>	ALYREF
<b>Dilution</b>	WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A IP~~N/A
<b>Format</b>	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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<b>Name</b>	ALYREF
<b>Synonyms</b>	ALY, BEF, THOC4
<b>Function</b>	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: <a href="#">15833825</a> , PubMed: <a href="#">15998806</a> , PubMed: <a href="#">17190602</a> ). 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: <a href="#">15833825</a> , PubMed: <a href="#">15998806</a> , PubMed: <a href="#">17190602</a> ). 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](#)).

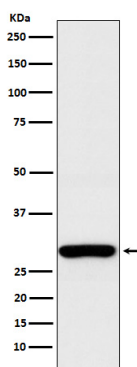
## Cellular Location

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



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