

THOC4/ALY Antibody

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	27	Rabbit	#Q86V81	10189

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

THOC4/ALY Antibody recognizes endogenous levels of total THOC4/ALY protein.

Species predicted to react based on 100% sequence homology

Hamster, Xenopus, Zebrafish, Bovine, Dog, Horse, Guinea Pig

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala245 of human THOC4/ALY protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

mRNA export is a process that is tightly coupled to mRNA splicing (1-4). Splicing and packaging of mRNAs in the form of an mRNA-protein complex (mRNP) leads to the recruitment of the mRNA export adaptor THOC4/ALY, via its interaction with the splicing factor UAP56, forming a large complex termed the transcription-export complex (TREX) (1,2,5). THOC4/ALY then directly interacts with NXF1/TAP, a part of the heterodimer that targets the mRNP to the nuclear pore complex, resulting in the shuttling of mRNP out of the nucleus and into the cytoplasm (1-3,6).

Background References

1. Katahira, J. (2012) *Biochim Biophys Acta* 1819, 507-13.
2. Siddiqui, N. and Borden, K.L. (2012) *Wiley Interdiscip Rev RNA* 3, 13-25.
3. Reed, R. and Magni, K. (2001) *Nat Cell Biol* 3, E201-4.
4. Masuda, S. et al. (2005) *Genes Dev* 19, 1512-7.
5. Luo, M.L. et al. (2001) *Nature* 413, 644-7.
6. Kang, Y. and Cullen, B.R. (1999) *Genes Dev* 13, 1126-39.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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