

LYAR Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51324

Specification

LYAR Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW

WB, IP, IHC-P, E <u>Q9NX58</u> Human Rabbit Polyclonal 44 KDa

LYAR Antibody - Additional Information

Gene ID 55646

Other Names Cell growth-regulating nucleolar protein, LYAR

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

LYAR Antibody - Protein Information

Name LYAR

Function

Plays a role in the maintenance of the appropriate processing of 47S/45S pre-rRNA to 32S/30S pre-rRNAs and their subsequent processing to produce 18S and 28S rRNAs (PubMed:24495227). Also acts at the level of transcription regulation. Along with PRMT5, binds the gamma-globin (HBG1/HBG2) promoter and represses its expression (PubMed:25092918). In

neuroblastoma cells, may also repress the expression of oxidative stress genes, including CHAC1, HMOX1, SLC7A11, ULBP1 and SNORD41 that encodes a small nucleolar RNA (PubMed:28686580). Preferentially binds to a DNA motif containing 5'-GGTTAT-3' (PubMed:25092918). Negatively regulates the antiviral innate immune response by targeting IRF3 and impairing its DNA-binding activity (PubMed:<a href="http://www.uniprot.org/citations/31413131"

target="_blank">31413131). In addition, inhibits NF-kappa-B-mediated expression of pro-inflammatory cytokines (PubMed:31413131). Stimulates phagocytosis of photoreceptor outer segments by retinal pigment epithelial cells (By similarity). Prevents nucleolin/NCL self-cleavage, maintaining a



normal steady-state level of NCL protein in undifferentiated embryonic stem cells (ESCs), which in turn is essential for ESC self-renewal (By similarity).

Cellular Location

Nucleus. Nucleus, nucleolus. Cytoplasm. Cell projection, cilium, photoreceptor outer segment {ECO:0000250|UniProtKB:Q08288}. Note=Component of pre- ribosomal particles, including pre-40S, pre-60S and pre-90S (PubMed:24495227). Associated with cytoplasmic ribosomes, but not polysomes, as a component of the 60S subunit (PubMed:24990247). In the retina, predominantly expressed in photoreceptor outer segments (By similarity). In the nucleolus, colocalizes with nucleolin/NCL, therefore may reside in the dense fibrillar component (DFC) (By similarity). {ECO:0000250|UniProtKB:Q08288, ECO:0000269|PubMed:24495227, ECO:0000269|PubMed:24990247}

Tissue Location Predominantly expressed in testis.

LYAR Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

LYAR Antibody - Images

LYAR Antibody - References

Wiemann S., et al.Genome Res. 11:422-435(2001). Ota T., et al.Nat. Genet. 36:40-45(2004). Ebert L., et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Mural R.J., et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Yu W.-Q., et al.Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases.