

LYAR Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51324

Product Information

Application WB, IP, IHC-P
Primary Accession Q9NX58
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 43634

Additional Information

Gene ID 55646

Other Names Cell growth-regulating nucleolar protein, LYAR

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human LYAR. The exact sequence is proprietary.

Dilution WB~~1:1000 IP~~N/A IHC-P~~N/A

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

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: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.

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.

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