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PHAX Antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI15236

Product Information

Application	WB
Primary Accession	Q9H814
Other Accession	NM_032177, NP_115553
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44403

Additional Information

Gene ID	51808
Alias Symbol	RNUXA
Other Names	Phosphorylated adapter RNA export protein, RNA U small nuclear RNA export adapter protein, PHAX, RNUXA
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-PHAX antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	PHAX Antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PHAX
Synonyms	RNUXA
Function	A phosphoprotein adapter involved in the XPO1-mediated U snRNA export from the nucleus (PubMed:39011894). Bridge components required for U snRNA export, the cap binding complex (CBC)-bound snRNA on the one hand and the GTPase Ran in its active GTP-bound form together with the export receptor XPO1 on the other. Its phosphorylation in the nucleus is required for U snRNA export complex assembly and export, while its dephosphorylation in the cytoplasm causes export complex disassembly. It is recycled back to the nucleus via the importin alpha/beta heterodimeric import receptor. The

directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Its compartmentalized phosphorylation cycle may also contribute to the directionality of export. Binds strongly to m7G-capped U1 and U5 small nuclear RNAs (snRNAs) in a sequence- unspecific manner and phosphorylation-independent manner (By similarity). Also plays a role in the biogenesis of U3 small nucleolar RNA (snoRNA). Involved in the U3 snoRNA transport from nucleoplasm to Cajal bodies. Binds strongly to m7G-capped U3, U8 and U13 precursor snoRNAs and weakly to trimethylated (TMG)-capped U3, U8 and U13 snoRNAs. Also binds to telomerase RNA.

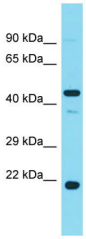
Cellular Location

Nucleus, nucleoplasm. Nucleus, Cajal body. Cytoplasm. Note=Located in the nucleoplasm and Cajal bodies. Shuttles between the nucleus and the cytoplasm. Shuttles between the nucleoplasm and Cajal bodies.

References

Ota T.,et al.Nat. Genet. 36:40-45(2004).
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Boulon S.,et al.Mol. Cell 16:777-787(2004).
Segref A.,et al.RNA 7:351-360(2001).
Watkins N.J.,et al.Mol. Cell 16:789-798(2004).

Images



Host: Rabbit
Target Name: PHAX
Sample Tissue: Fetal Liver lysates
Antibody Dilution: 1.0µg/ml