

PHAX Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12834b

Specification

PHAX Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q9H814
Other Accession	Q63068 , Q9JIT9 , Q3MHI4 , NP_115553.2
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	44403
Antigen Region	297-326

PHAX Antibody (C-term) - Additional Information

Gene ID 51808

Other Names

Phosphorylated adapter RNA export protein, RNA U small nuclear RNA export adapter protein, PHAX, RNUXA

Target/Specificity

This PHAX antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 297-326 amino acids from the C-terminal region of human PHAX.

Dilution

WB~~1:1000
IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PHAX Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PHAX Antibody (C-term) - Protein Information

Name PHAX

Synonyms RNUXA

Function A phosphoprotein adapter involved in the XPO1-mediated U snRNA export from the nucleus. 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. Binds also to telomerase RNA.

Cellular Location

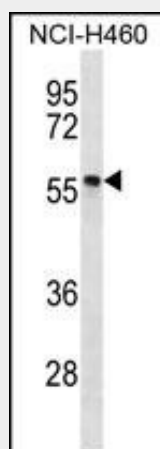
Nucleus, nucleoplasm. Nucleus, Cajal body. Cytoplasm. Note=Located in the nucleoplasm and Cajal bodies. Shuttles between the nucleus and the cytoplasm. Shuttles between the nucleoplasm and Cajal bodies.

PHAX Antibody (C-term) - Protocols

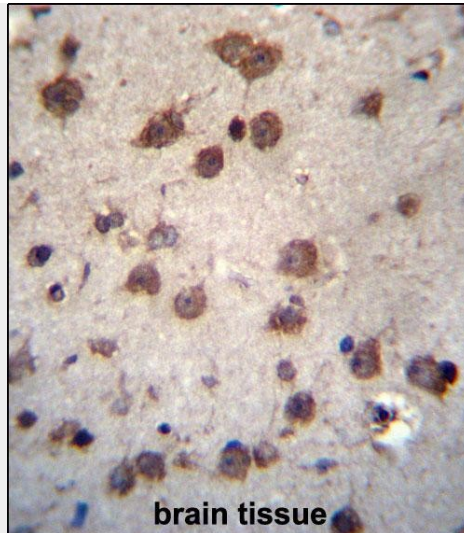
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PHAX Antibody (C-term) - Images



PHAX Antibody (C-term) (Cat. #AP12834b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the PHAX antibody detected the PHAX protein (arrow).



brain tissue

PHAX Antibody (C-term) (Cat. #AP12834b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PHAX Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

PHAX Antibody (C-term) - Background

A phosphoprotein adapter involved in the XPO1-mediated U snRNA export from the nucleus. 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). Plays also 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. Binds also to telomerase RNA.

PHAX Antibody (C-term) - References

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Matsuoka, S., et al. Science 316(5828):1160-1166(2007)
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Watkins, N.J., et al. Mol. Cell 16(5):789-798(2004)
Boulon, S., et al. Mol. Cell 16(5):777-787(2004)