Product Name: PHAX Rabbit Polyclonal Antibody
Catalog #: APRab16057
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight	48kDa

Antigen Information

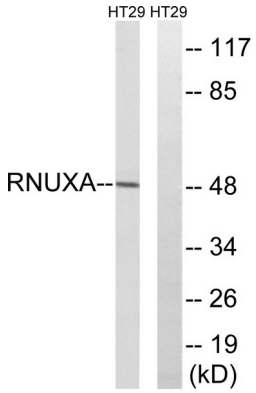
Gene Name	PHAX
Alternative Names	PHAX; RNUXA; Phosphorylated adapter RNA export protein; RNA U small nuclear RNA export adapter protein
Gene ID	51808.0
SwissProt ID	Q9H814
Immunogen	The antiserum was produced against synthesized peptide derived from human RNUXA. AA range:141-190

Background

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). 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.,PTM:Phosphorylated in the nucleus. Dephosphorylated in the cytoplasm (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the PHAX family.,subcellular location:Located in the nucleoplasm and Cajal bodies. Shuttles between the nucleus and the cytoplasm. Shuttles between the nucleoplasm and Cajal bodies.,subunit:Found in a U snRNA export complex with PHAX/RNUXA, NCBP1, NCBP2, RAN, XPO1 and m7G-capped RNA. Part of a precomplex with PHAX/RNUXA, NCBP1, NCBP2 and m7G-capped RNA. Interacts with NCBP1 (By similarity). Found in a complex with snoRNA.,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). 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.,PTM:Phosphorylated in the nucleus. Dephosphorylated in the cytoplasm (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the PHAX family.,subcellular location:Located in the nucleoplasm and Cajal bodies. Shuttles between the nucleus and the cytoplasm. Shuttles between the nucleoplasm and Cajal bodies.,subunit:Found in a U snRNA export complex with PHAX/RNUXA, NCBP1, NCBP2, RAN, XPO1 and m7G-capped RNA. Part of a precomplex with PHAX/RNUXA, NCBP1, NCBP2 and m7G-capped RNA. Interacts with NCBP1 (By similarity). Found in a complex with snoRNA.,

Research Area

Image Data



Western blot analysis of lysates from HT-29 cells, using RNUXA Antibody. The lane on the right is blocked with the synthesized peptide.