

Product datasheet for **TA326931S**

ARHGEF7 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:500-1:2000
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human ARHGEF7
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	Rho guanine nucleotide exchange factor 7
Database Link:	NP_003890 Entrez Gene 54126 Mouse Entrez Gene 8874 Human Q14155



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Background:

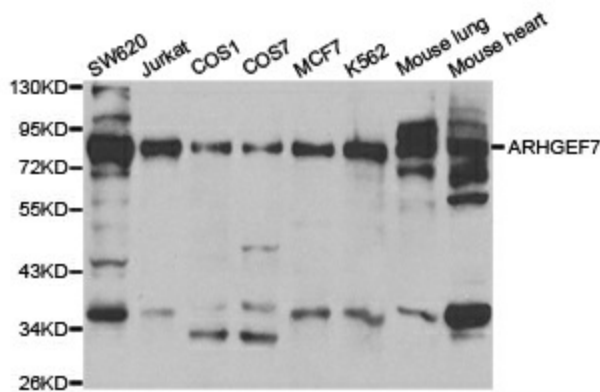
Cool/Pix proteins comprise a family of guanine nucleotide exchange factors (GEFs) localized to focal adhesions. The family consists of two isoforms, cool2/apix and cool1/ β Pix, the latter having two splice variants that vary in their carboxy termini. Cool1/ β Pix, like other GEFs, has a DH (Dbl homology) domain, which allows binding of small GTPases and GDP/GTP exchange, and a PH (Pleckstrin homology) domain, which is important in regulating subcellular localization. Cool1/ β Pix also has an SH3 domain, which binds to the PAK kinase, a downstream effector of cdc42 and Rac. Phosphorylation of cool1/ β Pix by PAK2 downstream of MAPK signaling alters the localization of a complex containing PAK2 and cool-1/ β Pix, regulating formation of growth cones in response to growth factors. Growth factor induced activation of Rac1 via cool1/ β Pix was later shown to occur independently of subcellular localization. Endothelin-1 stimulation of mesangial cells stimulates the protein kinase A (PKA) pathway, resulting in translocation of cool-1/ β Pix and activation of cdc42.

Synonyms:

BETA-PIX; COOL-1; COOL1; Nbla10314; P50; P50BP; P85; P85COOL1; P85SPR; PAK3; PIXB

Protein Pathways:

Regulation of actin cytoskeleton

Product images:

Western blot analysis of extracts of various cell lines, using ARHGEF7 antibody.