

Product name:	PRAK Rabbit Polyclonal Antibody
Cat number:	ABN16455
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human MAPKAPK5. AA range:148-197
Reactivity:	Human,Mouse
Applications:	WB 1:500-1:2000,IHC 1:50-1:300
Molecular Weight:	60kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

The protein encoded by this gene is a tumor suppressor and member of the serine/threonine kinase family. In response to cellular stress and proinflammatory cytokines, this kinase is activated through its phosphorylation by MAP kinases including MAPK1/ERK, MAPK14/p38-alpha, and MAPK11/p38-beta. The encoded protein is found in the nucleus but translocates to the cytoplasm upon phosphorylation and activation. This kinase phosphorylates heat shock protein HSP27 at its physiologically relevant sites. Two alternately spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Nov 2012], catalytic activity: ATP + a protein = ADP + a phosphoprotein., enzyme regulation: p38 alpha and beta-dependent phosphorylation increases its activity. Activated by stress-related extracellular stimuli; such as H₂O₂, arsenite, anisomycin TNF alpha and also PMA and the calcium ionophore A23187; but to a lesser extent. In vitro, activated by SQSTM1., function: Mediates stress-induced small heat shock protein 27 phosphorylation., PTM: Phosphorylated on Thr-182; which is the regulatory phosphorylation site and is located on the T-loop/loop 12., similarity: Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family., similarity: Contains 1 protein kinase domain., subcellular location: Also observed in the nucleus., subunit: Interacts with SQSTM1., tissue specificity: Expressed ubiquitously.,