Data Sheet (Cat.No.TMAC-03015)

Anti-Phospho-p70 S6 Kinase (Ser 411) Antibody (7V681)

Product Details

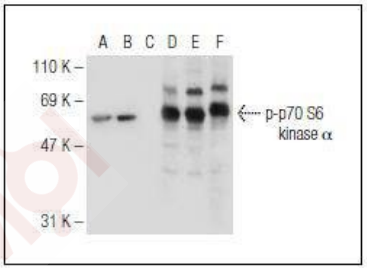
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 70 kDa.
Clone:	7V681
Purification:	ProA affinity purified

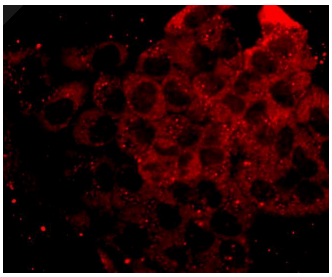
Applications

Verified Activity:

1. Western blot analysis of p70 S6 kinase α phosphorylation in untreated (A,D), insulin treated (B,E) and insulin treated and lambda protein phosphatase treated (C,F) HEK293 whole cell lysates. Antibodies tested include p-p70 S6 kinase α (A-6) (A,B,C) and p70 S6 kinase α (C-18) (D, E,F).

2. Immunofluorescence staining of anisomycin-treated, methanol-fixed NIH/3T3 cells, showing cytoplasmic and nuclear localization of activated p70 S6 kinase α (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing nuclear staining of squamous epithelial cells (B).





Application:	IF,IHC-P,IP,WB
Recommended	WB: 1:100-1000; IHC-P: 1:50-500; IP: 1-2 μg per 100-500 μg of total protein(1 ml of cell lysate)

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A sequence containing Ser 411 phosphorylated p70 S6 kinase α isoform 2 of human origin
Antigen Species:	human
Uniprot ID:	Q9UBS0
Synonyms:	p-p70 S6 Kinase (S 411);p-p70 S6 Kinase (Ser 411);p70 S6 Kinase (p-Ser 411);p70 S6 Kinase (p-S 411)

Research Background

In studies to elucidate key regulatory pathways in signal transduction, several protein serine/threonine (Ser/Thr) kinases have been identified. Included among such kinases are two distinct families of 40S ribosomal protein S6 Ser/Thr kinases present in somatic animal cells, designated p70 S6 kinase and p90 Rsk kinase. p90 Rsk kinase is maximally activated within minutes of addition of growth factors or phorbol ester to cultured cells followed by activation of p70 S6 kinase. Both enzymes are regulated by serine/threonine phosphorylation, suggesting that specific kinases may exist upstream in the signaling pathway that regulate these kinases. In fact, evidence suggests that one such family of activating enzymes includes the members of the ERK MAP kinase family. The ERK MAP kinases are, in turn, regulated by phosphorylation at threonine and tyrosine residues by a protein kinase designated