

Datasheet for ABIN6240990  
**anti-RPS6KA3 antibody (pThr573)**

## 2 Images

[Go to Product page](#)

## Overview

Quantity:	100 µL
Target:	RPS6KA3
Binding Specificity:	pThr573
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RPS6KA3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

## Product Details

Immunogen:	synthetic peptide
------------	-------------------

## Target Details

Target:	RPS6KA3
Alternative Name:	p90 RSK ( <a href="#">RPS6KA3 Products</a> )
Background:	Serine/threonine-protein kinase that acts downstream of ERK (MAPK1/ERK2 and MAPK3/ERK1) signaling and mediates mitogenic and stress-induced activation of the transcription factors CREB1, ETV1/ER81 and NR4A1/NUR77, regulates translation through RPS6 and EIF4B phosphorylation, and mediates cellular proliferation, survival, and differentiation by modulating mTOR signaling and repressing pro-apoptotic function of BAD and DAPK1. In fibroblast, is required for EGF-stimulated phosphorylation of CREB1, which results in

## Target Details

the subsequent transcriptional activation of several immediate-early genes. In response to mitogenic stimulation (EGF and PMA), phosphorylates and activates NR4A1/NUR77 and ETV1/ER81 transcription factors and the cofactor CREBBP. Upon insulin- derived signal, acts indirectly on the transcription regulation of several genes by phosphorylating GSK3B at 'Ser-9' and inhibiting its activity. Phosphorylates RPS6 in response to serum or EGF via an mTOR-independent mechanism and promotes translation initiation by facilitating assembly of the preinitiation complex. In response to insulin, phosphorylates EIF4B, enhancing EIF4B affinity for the EIF3 complex and stimulating cap-dependent translation. Is involved in the mTOR nutrient-sensing pathway by directly phosphorylating TSC2 at 'Ser-1798', which potently inhibits TSC2 ability to suppress mTOR signaling, and mediates phosphorylation of RPTOR, which regulates mTORC1 activity and may promote rapamycin-sensitive signaling independently of the PI3K/AKT pathway. Mediates cell survival by phosphorylating the pro- apoptotic proteins BAD and DAPK1 and suppressing their pro- apoptotic function. Promotes the survival of hepatic stellate cells by phosphorylating CEBPB in response to the hepatotoxin carbon tetrachloride (CCl4). Is involved in cell cycle regulation by phosphorylating the CDK inhibitor CDKN1B, which promotes CDKN1B association with 14-3-3 proteins and prevents its translocation to the nucleus and inhibition of G1 progression.

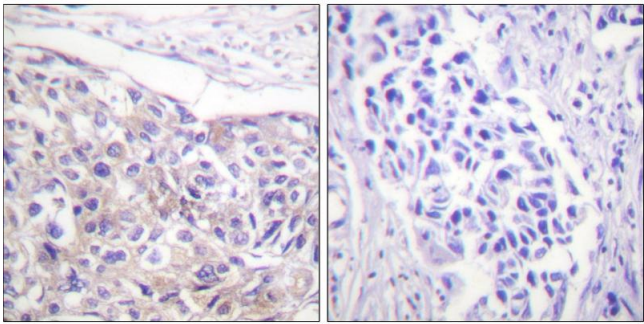
UniProt:	<a href="#">Q15418</a>
Pathways:	<a href="#">MAPK Signaling</a> , <a href="#">Neurotrophin Signaling Pathway</a> , <a href="#">Activation of Innate immune Response</a> , <a href="#">Toll-Like Receptors Cascades</a>

## Application Details

Application Notes:	WB: 1:1000. IHC: 1:50~100
Restrictions:	For Research Use only

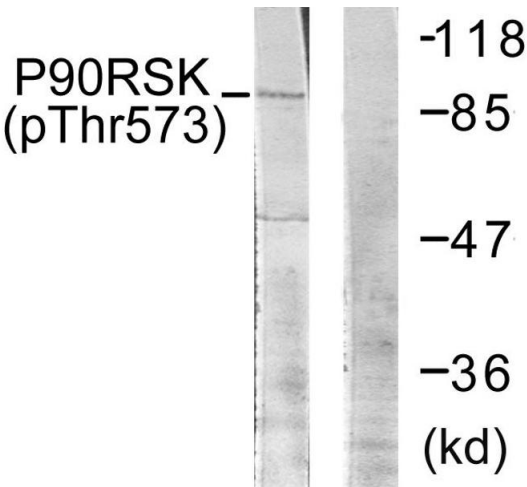
## Handling

Format:	Liquid
Storage:	4 °C,-20 °C



Immunohistochemistry

**Image 1.** Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue using p90 RSK (Phospho-Thr573) antibody.



Western Blotting

**Image 2.** Western blot analysis of extracts from 293 cells, treated with UV (30 mins), using p90 RSK (Phospho-Thr573) antibody.