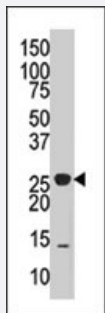


# DUSP14 polyclonal antibody

Catalog # PAB4143

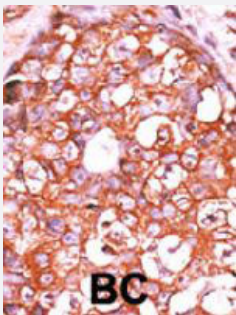
Size 400 uL

## Applications



### Western Blot (Tissue lysate)

Western blot analysis of DUSP14 polyclonal antibody (Cat # PAB4143) in mouse kidney tissue lysate (35 ug/lane). DUSP14 (arrow) was detected using the purified polyclonal antibody (1 : 60 dilution).



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human breast cancer tissue reacted with DUSP14 polyclonal antibody (Cat # PAB4143), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

## Specification

<b>Product Description</b>	Rabbit polyclonal antibody raised against synthetic peptide of DUSP14.
<b>Immunogen</b>	A synthetic peptide (conjugated with KLH) corresponding to amino acids 1-30 of human DUSP14.
<b>Host</b>	Rabbit
<b>Reactivity</b>	Human, Mouse
<b>Form</b>	Liquid
<b>Purification</b>	Protein G purification

<b>Recommend Usage</b>	ELISA Immunohistochemistry (1:50-100) Western Blot (1:1000) The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	In PBS (0.09% sodium azide).
<b>Storage Instruction</b>	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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- Enzyme-linked Immunoabsorbent Assay

## Gene Info — DUSP14

<b>Entrez GeneID</b>	<a href="#">11072</a>
<b>Protein Accession#</b>	<a href="#">O95147</a>
<b>Gene Name</b>	DUSP14
<b>Gene Alias</b>	MKP-L, MKP6
<b>Gene Description</b>	dual specificity phosphatase 14
<b>Omim ID</b>	<a href="#">606618</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>

## Gene Summary

In addition to antigen recognition by the T-cell receptor, T-cell activation requires a second signal from a costimulatory receptor, such as CD28 (MIM 186760), which interacts with B7-1 (CD80; MIM 112203) and B7-2 (CD86; MIM 601020) ligands on antigen-presenting cells. CD28 costimulation induces transcription of interleukin-2 (IL2; MIM 147680) and stabilizes newly synthesized IL2 through the activation of mitogen-activated protein kinases (MAPKs), such as ERK (e.g., MAP2K4; MIM 601335) and JNK (see MIM 601158), and the subsequent creation of AP1 transcription factor (see MIM 165160). DUSP14 is a negative regulator of CD28 signaling.[supplied by OMIM]

## Other Designations

MKP-1 like protein tyrosine phosphatase|OTTHUMP00000164064|OTTHUMP00000164065

## Publication Reference

- [Monocyte chemoattractant protein-induced protein 1 targets hypoxia-inducible factor 1 \$\alpha\$  to protect against hepatic ischemia/reperfusion injury.](#)

Sun P, Lu YX, Cheng D, Zhang K, Zheng J, Liu Y, Wang X, Yuan YF, Tang YD.  
Hepatology (Baltimore, Md.) 2018 May; [Epub].

Application: IF, IP-WB, WB-Ti, WB-Tr, Human, Liver, LO2 cells

- [Dusp14 protects against hepatic ischemia-reperfusion injury via Tak1 suppression.](#)

Wang X, Mao W, Fang C, Tian S, Zhu X, Yang L, Huang Z, Li H.  
Journal of Hepatology 2017 Sep; [Epub].

Application: IF, WB-Ce, WB-Ti, Human, Mouse, Liver samples of liver transplantation patients, Mouse liver, Mouse hepatocytes

- [Dual-specificity phosphatase 14 protects the heart from aortic banding-induced cardiac hypertrophy and dysfunction through inactivation of TAK1-P38MAPK/-JNK1/2 signaling pathway.](#)

Li CY, Zhou Q, Yang LC, Chen YH, Hou JW, Guo K, Wang YP, Li YG.  
Basic Research in Cardiology 2016 Feb; 111(2):19.

Application: WB, Human, Mouse, Rat, Human normal hearts and dilated cardiomyopathy hearts, Mouse cardiomyocytes, Rat cardiomyocytes

- [Negative-feedback regulation of CD28 costimulation by a novel mitogen-activated protein kinase phosphatase, MKP6.](#)

Marti F, Krause A, Post NH, Lyddane C, Dupont B, Sadelain M, King PD.  
Journal of Immunology 2001 Jan; 166(1):197.

## Pathway

- [MAPK signaling pathway](#)