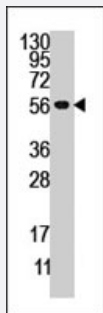


# DUSP4 polyclonal antibody

Catalog # PAB4129

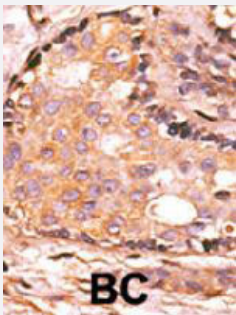
Size 400 uL

## Applications



### Western Blot (Tissue lysate)

Western blot analysis of DUSP4 polyclonal antibody (Cat # PAB4129) in mouse brain tissue lysate (35 ug/lane). DUSP4 (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 DUSP4 polyclonal antibody (Cat # PAB4129), 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 DUSP4.                 |
| <b>Immunogen</b>           | A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human DUSP4. |
| <b>Host</b>                | Rabbit                                                                                |
| <b>Reactivity</b>          | Human, Mouse                                                                          |
| <b>Form</b>                | Liquid                                                                                |
| <b>Purification</b>        | Protein G purification                                                                |

|                            |                                                                                                                                                     |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Recommend Usage</b>     | ELISA (1:1000)<br>Western Blot (1:100-500)<br>Immunohistochemistry (1:50-100)<br>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.<br>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.                              |

## Applications

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- Enzyme-linked Immunoabsorbent Assay

## Gene Info — DUSP4

|                           |                                  |
|---------------------------|----------------------------------|
| <b>Entrez GeneID</b>      | <a href="#">1846</a>             |
| <b>Protein Accession#</b> | <a href="#">NP_001385;Q13115</a> |
| <b>Gene Name</b>          | DUSP4                            |
| <b>Gene Alias</b>         | HVH2, MKP-2, MKP2, TYP           |
| <b>Gene Description</b>   | dual specificity phosphatase 4   |
| <b>Omim ID</b>            | <a href="#">602747</a>           |
| <b>Gene Ontology</b>      | <a href="#">Hyperlink</a>        |

**Gene Summary**

The protein encoded by this gene is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product inactivates ERK1, ERK2 and JNK, is expressed in a variety of tissues, and is localized in the nucleus. Two alternatively spliced transcript variants, encoding distinct isoforms, have been observed for this gene. In addition, multiple polyadenylation sites have been reported. [provided by RefSeq]

**Other Designations**

MAP kinase phosphatase 2|VH1 homologous phosphatase 2|serine/threonine specific protein phosphatase

**Publication Reference**

- [Discordance between the binding affinity of mitogen-activated protein kinase subfamily members for MAP kinase phosphatase-2 and their ability to activate the phosphatase catalytically.](#)  
Chen P, Hutter D, Yang X, Gorospe M, Davis RJ, Liu Y.  
The Journal of Biological Chemistry 2001 Aug; 276(31):29440.
- [Chromosomal localization of three human dual specificity phosphatase genes \(DUSP4, DUSP6, and DUSP7\).](#)  
Smith A, Price C, Cullen M, Muda M, King A, Ozanne B, Arkinstall S, Ashworth A.  
Genomics 1997 Jun; 42(3):524.
- [The mitogen-activated protein kinase phosphatases PAC1, MKP-1, and MKP-2 have unique substrate specificities and reduced activity in vivo toward the ERK2 sevenmaker mutation.](#)  
Chu Y, Solski PA, Khosravi-Far R, Der CJ, Kelly K.  
The Journal of Biological Chemistry 1996 Mar; 271(11):6497.  
  
Application: IP, Human, Monkey, COS-7 cells, Human T cells

**Pathway**

- [MAPK signaling pathway](#)