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DUSP6 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8449a

Specification

DUSP6 Antibody (Center) - Product Information

Application	**IHC-P-Leica, IF, WB,E**
Primary Accession	Q16828
Other Accession	Q2KJ36, NP_001937
Reactivity	**Human, Mouse, Rat**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**58-89**

DUSP6 Antibody (Center) - Additional Information

Gene ID 1848

Other Names
Dual specificity protein phosphatase 6, Dual specificity protein phosphatase PYST1, Mitogen-activated protein kinase phosphatase 3, MAP kinase phosphatase 3, MKP-3, DUSP6, MKP3, PYST1

Target/Specificity
This DUSP6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-89 amino acids from the Central region of human DUSP6.

Dilution
IHC-P-Leica~~1:500
IF~~1:10~50
WB~~1:2000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
DUSP6 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

DUSP6 Antibody (Center) - Protein Information

Name DUSP6

Synonyms MKP3, PYST1

Function Dual specificity protein phosphatase, which mediates dephosphorylation and inactivation of MAP kinases (PubMed:8670865). Has a specificity for the ERK family (PubMed:8670865). Plays an important role in alleviating chronic postoperative pain (By similarity). Necessary for the normal dephosphorylation of the long-lasting phosphorylated forms of spinal MAPK1/3 and MAP kinase p38 induced by peripheral surgery, which drives the resolution of acute postoperative allodynia (By similarity). Also important for dephosphorylation of MAPK1/3 in local wound tissue, which further contributes to resolution of acute pain (By similarity). Promotes cell differentiation by regulating MAPK1/MAPK3 activity and regulating the expression of AP1 transcription factors (PubMed:29043977).

Cellular Location
Cytoplasm.

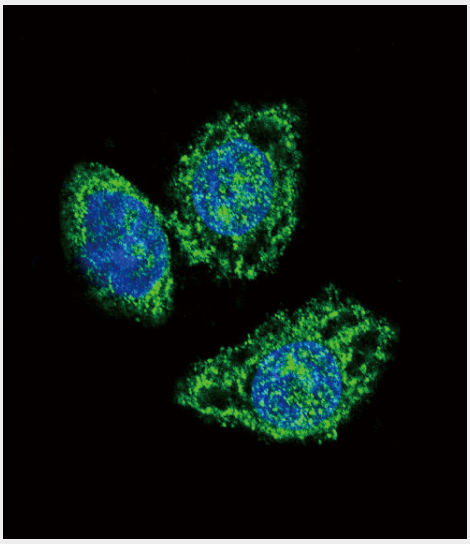
Tissue Location
Expressed in keratinocytes (at protein level).

DUSP6 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DUSP6 Antibody (Center) - Images



Confocal immunofluorescent analysis of DUSP6 Antibody (Center) (Cat#AP8449a) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the

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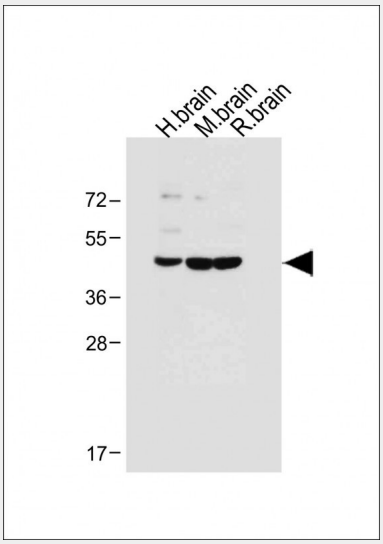
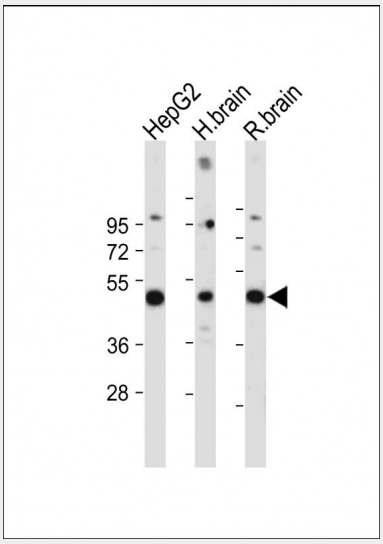
cell nuclear (blue).



All lanes : Anti-DUSP6 Antibody (Center) at 1:500 dilution Lane 1: Human brain tissue lysate Lane 2: Mouse brain tissue lysate Lane 3: Rat brain tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-DUSP6 Antibody (Center) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Human brain tissue lysate Lane 3: Rat brain tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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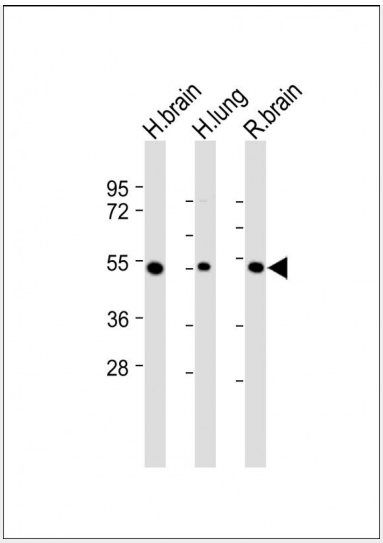
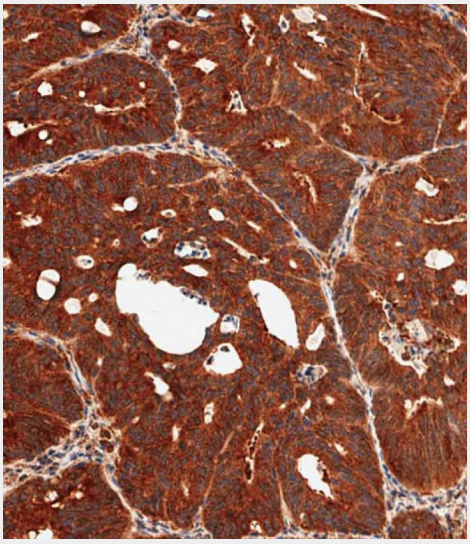


All lanes : Anti-DUSP6 Antibody (Center) at 1:2000 dilution Lane 1: Human brain lysate Lane 2: Human lung lysate Lane 3: Rat brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using AP8449a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

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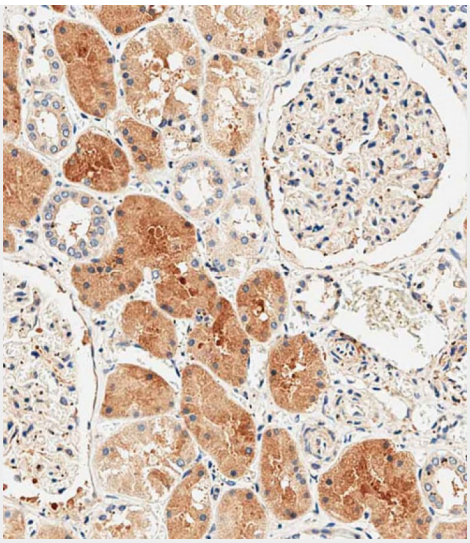

Immunohistochemical analysis of paraffin-embedded human kidney tissue using AP8449a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

DUSP6 Antibody (Center) - Background

DUSP6 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 ERK2, is expressed in a variety of tissues with the highest levels in heart and pancreas, and unlike most other members of this family, is localized in the cytoplasm. Two
transcript variants encoding different isoforms have been found for the DUSP6 gene.

DUSP6 Antibody (Center) - References

Mod. Pathol. 18 (8), 1034-1042 (2005)
J. Hum. Genet. 50 (4), 159-167 (2005)
J. Biol. Chem. 279 (40), 41882-41891 (2004)
Biochemistry 42 (51), 15197-15207 (2003)
J. Biol. Chem. 271 (8), 4319-4326 (1996)