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Datasheet for 600-401-GQ2S

MEK2 C-Term Antibody

Overview

Description:	Anti-MEK2 (RABBIT) Antibody - 600-401-GQ2S
Item No.:	600-401-GQ2S
Size:	25 µL
Applications:	ELISA, IHC, WB, IP
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	MEK2 antibodies detect the MEK2 isoform. Mitogen-activated protein kinase kinase 2, also known as MEK2 or MKK2, is an integral component of the MAP kinase cascade that regulates cell growth and differentiation. This pathway also plays a key role in synaptic plasticity in the brain. Activated MEK 2 acts as a dual specificity kinase phosphorylating both a threonine and a tyrosine residue on MAP kinase. MEK1 and MEK2 are about 80% identical to each other, and nearly identical within the kinase domain. The MEK2 antibody is ideal for investigators involved in Neuroscience, Cell Signaling and Cancer Research.
Synonyms:	rabbit anti-MEK2 antibody, Dual specificity mitogen-activated protein kinase kinase 2, MAP kinase kinase 2, MAPKK 2, MAP2K2, MEK, MEK 2, MKK2, PRKMK2, CFC4, MEK-2, ERK activator kinase 2, MAPK/ERK kinase 2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MAP2K2
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-MEK2 Antibody was produced in rabbits by repeated immunizations with synthetic peptide corresponding to amino acid residues near the C-terminus human MEK2 protein conjugated to KLH.
Purity/Specificity:	This affinity purified antibody is directed against human MEK2 protein. Anti-MEK2 antibody was prepared from monospecific antiserum by immunoaffinity chromatography using synthetic peptide coupled to agarose beads. Cross reactivity is expected to occur with human, mouse and rat based on sequence identity of the peptide immunogen. This antibody does not react with the MEK1 isoform.
Relevant Links:	• UniProtKB - P36507

Application Details

Tested Applications:	ELISA, IHC, WB
Suggested Applications:	IP (Based on references)
Application Note:	Anti-MEK 2 (RABBIT) antibody has been tested in ELISA, Western Blotting, and IHC. Specific conditions of reactivity should be optimized by the end user. Expect a band of approximately 44 kDa.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	5.0 µg/ml
IHC:	1:100
WB:	1.0 ug/mL

Formulation

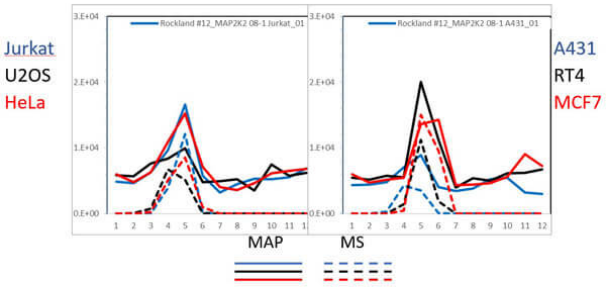
Physical State:	Liquid (sterile filtered)
Concentration:	1.09 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

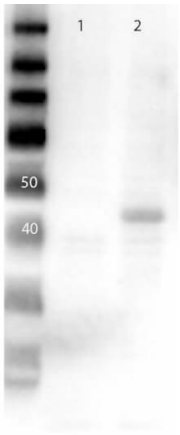
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

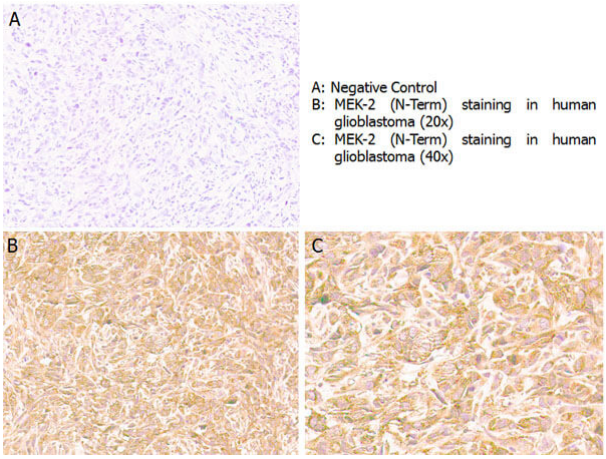
Images



PAGE-MAP
PAGE-MAP (microsphere affinity proteomics) of Rabbit Anti-MEK2/MAP2K2 Antibody (Catalog Number: 600-401-GQ2, Lot Number: 36409). Antibody array western blot binding of gelfree size separated fractions of multiple lysates (solid lines) and shotgun mass spectroscopy identification (dashed lines) of the target band run in parallel correlate confirming the specificity of this antibody against MEK2/MAP2K2. Data was provided by the Lund-Johansen lab of Oslo University Hospital. For more information on PAGE-MAP/IP-MS identification of antibody specificity and its large-scale implementation for antibody validation see Sikorski et. al., (2018) Nature Methods 15, 909-912.



Western Blot
Western Blot of Anti-MEK2 C-term Antibody. Lane 1: MEK1 rec lysate. Lane 2: MEK2 rec lysate. Load: 10ug. Primary Antibody: Anti-MEK2 at 1µg/mL overnight at 4°C. Secondary Antibody: Goat Anti-Rabbit Peroxidase Conjugated Antibody (p/n 611-103-122) at 1:40,000 for 30 min at RT. Blocking: BlockOut Universal Blocking buffer (p/n MB-073). Predicted MW: 45kDa.



Immunohistochemistry
Immunohistochemistry with anti-MEK2 (N-Term) antibody showing positive staining in human glioblastoma tissue at 20x and 40x (B & C). Staining was performed on Leica Bond system using the standard protocol. Formalin fixed/paraffin embedded tissue sections were subjected to antigen retrieval and then incubated with rabbit anti-MEK2 (N-Term) antibody 600-401-GN8 at 1:100 dilution for 60 minutes. Biotinylated Anti-rabbit secondary antibody was used at 1:200 dilution to detect primary antibody. The reaction was developed using streptavidin-HRP conjugated compact polymer system and visualized with chromogen substrate, 3'3-diamino-benzidine substrate (DAB). The sections were then counterstained with hematoxylin to detect cell nuclei.

References

- Sikorski et al. A high-throughput pipeline for validation of antibodies. *Nature Methods* (2018)

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