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Datasheet for 200-301-GQ0

# MEK1 C-Term Antibody

## Overview

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| **Description:** | Anti-MEK1 (MOUSE) Monoclonal Antibody - 200-301-GQ0 |
| **Item No.:** | 200-301-GQ0 |
| **Size:** | 100 µg |
| **Applications:** | ELISA, WB, IP |
| **Reactivity:** | Human, Mouse, Rat |
| **Host Species:** | Mouse |

## Product Details

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| **Background:** | MEK1 antibodies detect the MEK1 isoform. Mitogen-activated protein kinase kinase 1, also known as MKK or MEK1, 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 1 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 MEK1 antibody is ideal for investigators involved in Neuroscience, Cell Signaling and Cancer Research. |
| **Synonyms:** | mouse anti-MEK1 antibody, MAP2K, MEK, MEK 1, MKK1, PRKMK1, MEK-1 Antibody |
| **Host Species:** | Mouse |
| **Clonality:** | Monoclonal |
| **Clone ID:** | 13B6.G12 |
| **Format:** | IgG |

## Target Details

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| **Gene Name:** | MAP2K1 |
| **Reactivity:** | Human, Mouse, Rat |
| **Immunogen Type:** | Conjugated Peptide |
| **Immunogen:** | Anti-MEK1 Monoclonal Antibody was produced in mice by repeated immunizations with synthetic peptide corresponding to amino acid residues near the C-terminus conjugated to KLH. |

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| **Purity/Specificity:** | This protein A purified mouse monoclonal antibody reacts specifically with human MEK1. Anti-MEK1 is purified from tissue culture supernatant by protein A purification. 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 MEK2 isoform. |
| **Relevant Links:** | • UniProtKB - Q02750 |

## Application Details

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| **Tested Applications:** | ELISA, WB |
| **Suggested Applications:** | IP (Based on references) |
| **Application Note:** | Anti-MEK 1 (MOUSE) antibody is tested in ELISA and Western Blotting. Specific conditions of reactivity should be optimized by the end user. Expect a band of approximately 43.5 kDa. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **ELISA:** | 1:40,000 |
| **WB:** | 1µg/mL |

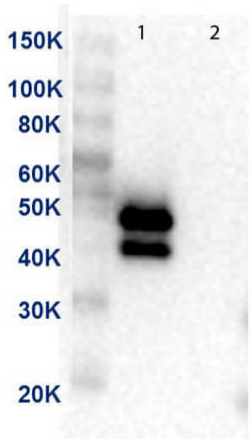
## Formulation

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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 1.0mg/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 |

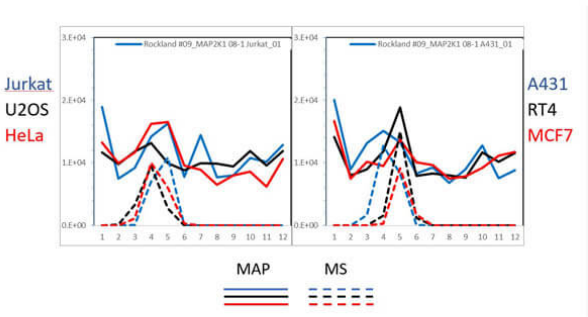
## Shipping & Handling

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| **Shipping Condition:** | Dry Ice |
| **Storage Condition:** | Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use. |
| **Expiration:** | Expiration date is one (1) year from date of receipt. |

## Images




**Western Blot**
Western Blot of Anti-MEK1 Antibody. Lane 1: MEK-1 recombinant protein. Lane 2: MEK-2 recombinant protein. Load: 50ng per lane. Primary Antibody: Anti-MEK1 supernatant clone neat over night at 4°C. Secondary Antibody: Anti-mouse HRP at 1:40,000 dilution.




**PAGE-MAP**
PAGE-MAP (microsphere affinity proteomics) of Mouse Anti-MEK1/MAP2K1 Antibody. (Catalog Number: 200-301-GQ0, Lot Number: 38106). 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 MEK1/MAP2K1. 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.

## References


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


## Disclaimer

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