Datasheet for 200-301-GQ1

ERK2 Internal Antibody

Overview

Description:	Anti-ERK2 (MOUSE) Monoclonal Antibody - 200-301-GQ1
Item No.:	200-301-GQ1
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	ERK2 antibodies detect the ERK2 isoform. Mitogen activated protein kinase 1, also known as MAPK1, ERK, or ERK2, is an integral component of the MAP kinase cascade that regulates cell growth and differentiation. ERK1 and ERK2 are activated by MEK1 and MEK2 in the B-raf signaling pathway resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Human ERK1 and ERK2 are 84% identical in sequence and share common functionality in cells. Anti-ERK2 antibody is ideal for investigators involved in Neuroscience, Cell Signaling and Cancer Research.
Synonyms:	mouse anti-ERK2 antibody, MAPK1, ERK, ERK-2, ERK2, MAPK2, P42MAPK, PRKM1, PRKM2, ERK-2 Antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	3H9.A1.A8
Format:	IgG

Target Details

Gene Name:	MAPK1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-ERK2 Monoclonal Antibody was produced in mice by repeated immunizations with synthetic peptide corresponding to amino acid residues near an internal region of ERK2 conjugated to KLH.
Purity/Specificity:	This protein A purified mouse monoclonal antibody reacts specifically with human ERK2. Anti-ERK2 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 ERK1 isoform.
Relevant Links:	• UniProtKB - P28482

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-ERK 2 (MOUSE) antibody has been tested by ELISA and Western Blotting. Specific conditions of reactivity should be optimized by the end user. Expect a band of approximately 41 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

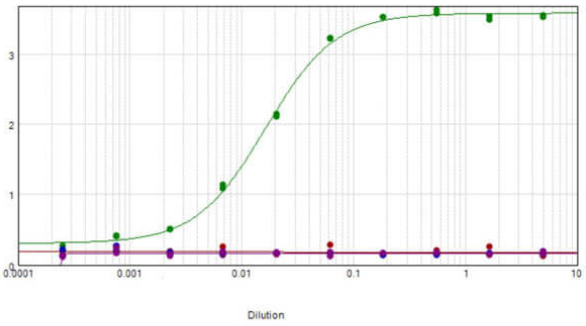
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 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

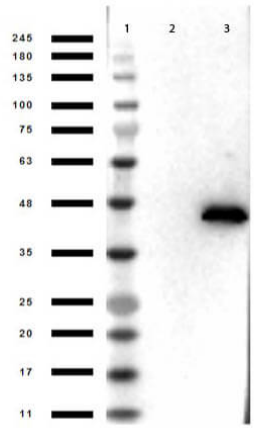
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C 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



ELISA
ELISA results of purified Mouse Anti-ERK2 (internal) Monoclonal Antibody tested against BSA-conjugated peptide of immunizing peptide ERK2 internal sequence (green line), as well as ERK2 c-term, ERK1 c-term, and ERK1 n-term. Each well was coated in duplicate with 0.1µg of conjugate. The starting dilution of antibody was 5µg/ml and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using Blocking buffer (p/n MB-060-1000), Rb-Anti-Ms IgG HRP conjugate (p/n 610-403-C46), and TMB substrate (p/n TMBE-1000).



Western Blot
Western Blot of Mouse anti-ERK2 Antibody. Lane 1: Opal Pre-Stained Molecular Weight Ladder (p/n MB-210-0500). Lane 2: ERK1 50ng. Lane 3: ERK2 50ng. Primary Antibody: Anti-ERK2 (internal) Monoclonal Antibody at 1µg/mL. Secondary Antibody: Rabbit anti-Mouse IgG HRP (p/n 610-403-C46) at 1:40,000. Blocking Buffer: BlockOut (p/n MB-073) for 30 min at RT. Expect: ~41kDa seen in lane 3 only.

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