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Datasheet for 600-401-R20

MAPK3 Antibody

Overview

Description:	Anti-MAPK3 (RABBIT) Antibody - 600-401-R20
Item No.:	600-401-R20
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Mitogen-activated protein kinase 3 is an enzyme that in humans is encoded by the MAPK3 gene. The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described. MAPK3 gene is mapped to human chromosome 16 by hybrid cell panel analysis. This antibody is suitable for researchers interested in stem cell, neuroscience and cancer research.
Synonyms:	ERT2,Extracellular signal-regulated kinase 1,
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MAPK3
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	MAPK3 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human MAPK3.

Purity/Specificity:	Anti-MAPK3 antibody is directed against human MAPK3 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, mouse, and rat based on 100% homology for the immunogen sequence. Cross reactivity with MAPK3 from other sources has not been determined.
Relevant Links:	• UniProtKB - P27361 • GeneID - 5595 • NCBI - NP_001035145.1

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-MAPK3 is tested for Immunohistochemistry -P, Immunocytochemistry, and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~43.1 kDa corresponding to the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	0.5-1µg/ml
WB:	0.1-0.5µg/ml

Formulation

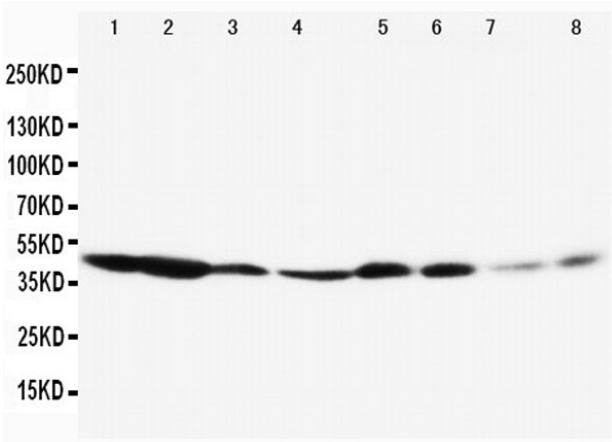
Physical State:	Lyophilized
Concentration:	0.5 mg/mL by UV absorbance at 280 nm
Buffer:	0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3
Preservative:	0.05mg Thimerosal
Stabilizer:	5mg BSA
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

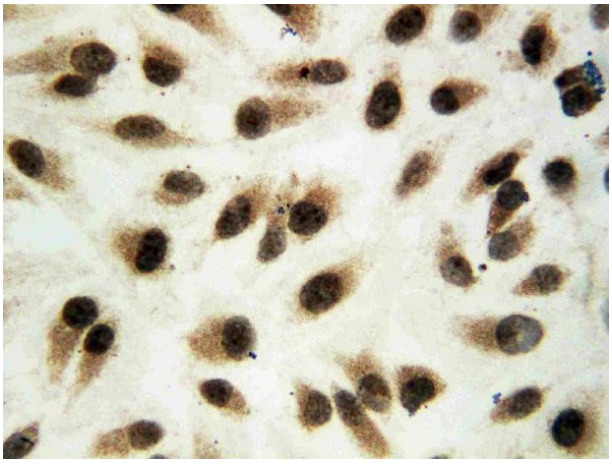
Shipping Condition:	Ambient

Storage Condition:	Store vial at 4° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

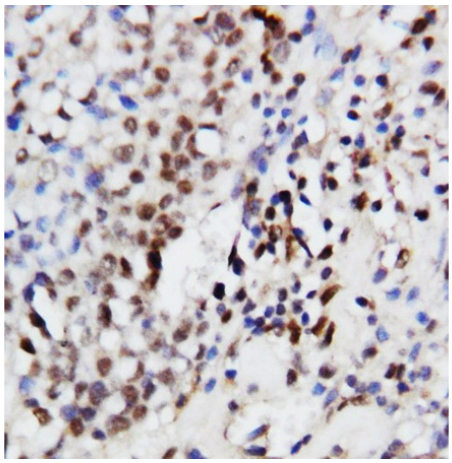
Images



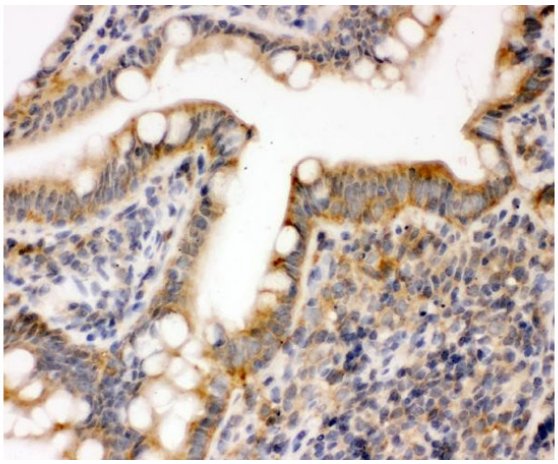
Western Blot
Western blotting of Anti-MAPK3/ERK1 antibody.
Lane 1: Rat Spleen Tissue Lysate, Lane 2: Rat Thymus Tissue Lysate, Lane 3: Rat Skeletal Muscle Tissue Lysate, Lane 4: Rat Kidney Tissue Lysate, Lane 5: HeLa Cell Lysate, Lane 6: JURKAT Cell Lysate, Lane 7: RAJI Cell Lysate, Lane 8: COLO320 Cell Lysate.



Immunocytochemistry
Immunocytochemistry of Anti-MAPK3/ERK1 antibody using HeLa cells.



Immunohistochemistry
Immunohistochemistry of Anti-MAPK3/ERK1 antibody.
Tissue: Human Mammary Cancer Tissue. IHC(P).



Immunohistochemistry
Immunohistochemistry of Anti-MAPK3/ERK1 antibody using anti-ERK1 antibody.
ERK1 was detected in paraffin-embedded section of rat intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-ERK1 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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