

## MAPK1 / ERK2 (Transcription Factor) Antibody

Mouse Monoclonal Antibody [Clone PCR-P-MAPK1-1D1]

Catalog No	Format	Size
5594-MSM3-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5594-MSM3-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5594-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

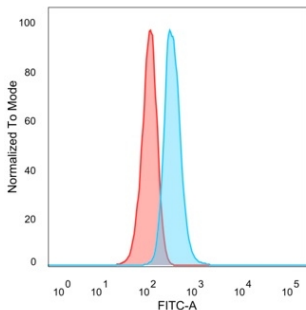
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	

### Product Details

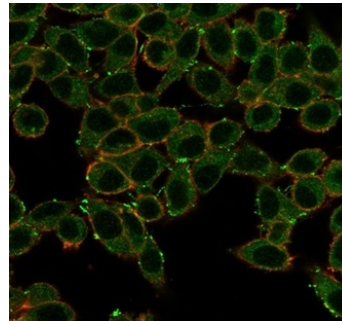
<b>Clone</b>	PCR-P-MAPK1-1D1
<b>Gene Name</b>	MAPK1
<b>Immunogen</b>	Recombinant full-length human MAPK1 protein
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2b
<b>Mol. Weight of Antigen</b>	41.3kDa
<b>Cellular Localization</b>	Caveola, Cell junction, Centrosome, Cytoplasm, Cytoskeleton, Focal adhesion, Membrane, Microtubule organizing center, Nucleus, Spindle
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	HeLa or U87 cells.

\*Optimal dilution for a specific application should be determined.

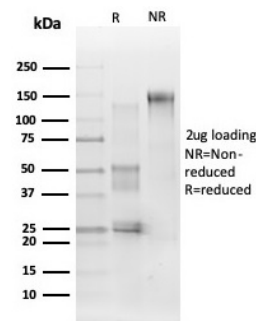
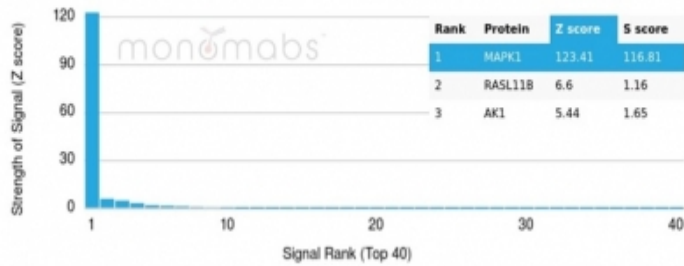
### Product Images for MAPK1 / ERK2 (Transcription Factor) Antibody



Flow cytometric analysis of PFA-fixed HeLa cells. MAPK1 Mouse Monoclonal Antibody (PCR-P-MAPK1-1D1) followed by goat anti-mouse IgG-CF488 (blue); unstained cells (red).



Immunofluorescence Analysis of PFA-fixed HeLa cells stained using MAPK1 Mouse Monoclonal Antibody (PCR-P-MAPK1-1D1) followed by goat anti-mouse IgG-CF488. Membrane stained with phalloidin.



SDS-PAGE Analysis of Purified MAPK1 Mouse Monoclonal Antibody (PCR-PCR-MAPK1-1D1). Confirmation of Purity and Integrity of Antibody.

Analysis of Protein Array containing more than 19,000 full-length human proteins using MAPK1 Mouse Monoclonal Antibody (PCR-PCR-MAPK1-1D1). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

### Specificity & Comments

Mitogen-activated protein kinase (MAPK) signaling pathways involve two closely-related MAP kinases, known as extracellular-signal-related kinase 1 (ERK 1, p44) and 2 (ERK 2, p42). Growth factors, steroid hormones, G protein coupled receptor ligands and neurotransmitters can initiate MAPK signaling pathways. Activation of ERK 1 and ERK 2 requires phosphorylation by upstream kinases such as MAP kinase (MEK), MEK kinase and Raf-1. ERK 1 and ERK 2 phosphorylation can occur at specific tyrosine and threonine sites mapping within consensus motifs that include the threonine-glutamate-tyrosine motif. ERK activation leads to dimerization with other ERKs and subsequent localization to the nucleus. Active ERK dimers phosphorylate serine and threonine residues on nuclear proteins and influence a host of responses that include proliferation, differentiation, transcription regulation and development.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Bladder Cancer, Breast Cancer, Cardiovascular, Colon Cancer, Cytokine Signaling, Developmental Biology, Immunology, Infectious Disease, MAPK Signaling, Neuroinflammation, Ovarian Cancer, Signal Transduction, Transcription Factors