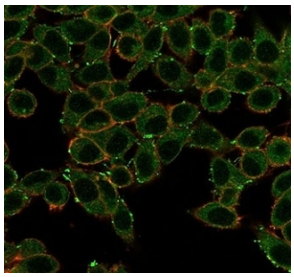
ERK2 Antibody / MAPK1 [clone PCRP-MAPK1-1D1] (V9723)

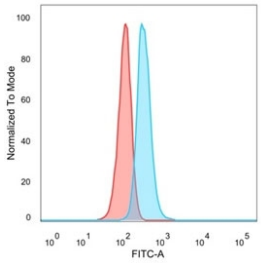
Catalog No.	Formulation	Size
V9723-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9723-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9723SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

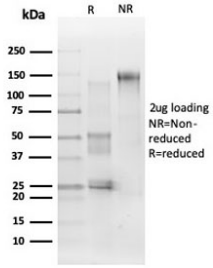
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	PCRP-MAPK1-1D1
Purity	Protein A/G affinity
UniProt	P28482
Localization	Cytoplasm, Nucleus
Applications	ELISA (order BSA-free Format For Coating) : Flow Cytometry : 0.5-2ug/million cells Immunofluorescence : 1-2ug/ml
Limitations	This ERK2 antibody is available for research use only.



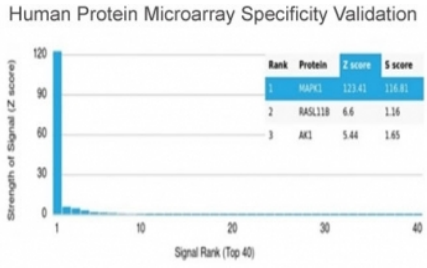
Immunofluorescent staining of PFA-fixed human HeLa cells using ERK2 antibody (green, clone PCRP-MAPK1-1D1) and phalloidin (red).



FACS staining of PFA-fixed human HeLa cells with ERK2 antibody (blue, clone PCRP-MAPK1-1D1), and unstained cells (red).



SDS-PAGE analysis of purified, BSA-free ERK2 antibody (clone PCRP-MAPK1-1D1) as confirmation of integrity and purity.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using ERK2 antibody (clone PCRP-MAPK1-1D1). These results demonstrate the foremost specificity of the PCRP-MAPK1-1D1 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

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.

Application Notes

Optimal dilution of the ERK2 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human protein was used as the immunogen for the ERK2 antibody.

Storage

Aliquot the ERK2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.