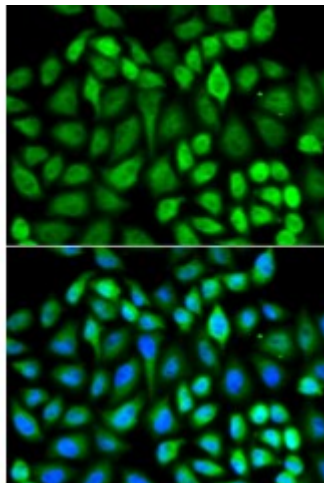


Anti-MAPK3 Antibody



Description

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.

Model	STJ115306
Host	Rabbit
Reactivity	Human
Applications	IF, WB
Immunogen	Synthetic peptide of human MAPK3
Gene ID	5595
Gene Symbol	MAPK3
Dilution range	WB 1:500 - 1:2000 IF 1:50 - 1:200
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Mitogen-activated protein kinase 3 MAP kinase 3 MAPK 3
Molecular Weight	43.136 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:6877 OMIM:601795 Reactome:R-HSA-110056
Alternative Names	Mitogen-activated protein kinase 3 MAP kinase 3 MAPK 3
Function	Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway, MAPK1/ERK2 and MAPK3/ERK1 are the 2 MAPKs which play an important role in the MAPK/ERK cascade, They participate also in a signaling cascade initiated by activated KIT and KITLG/SCF, Depending on the cellular context, the MAPK/ERK cascade mediates diverse biological functions such as cell growth, adhesion, survival and differentiation through the regulation of transcription, translation, cytoskeletal rearrangements, The MAPK/ERK cascade plays also a role in initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors, About 160 substrates have already been discovered for ERKs, Many of these substrates are localized in the nucleus, and seem to participate in the regulation of transcription upon stimulation, However, other substrates are found in the cytosol as well as in other cellular organelles, and those are responsible for processes such as translation, mitosis and apoptosis, Moreover, the MAPK/ERK cascade is also involved in the regulation of the endosomal dynamics, including lysosome processing and endosome cycling through the perinuclear recycling compartment (PNRC)
Cellular Localization	Cytoplasm, Nucleus, Membrane, caveola,
Post-translational Modifications	Phosphorylated upon KIT and FLT3 signaling , Dually phosphorylated on Thr-202 and Tyr-204, which activates the enzyme, Ligand-activated ALK induces tyrosine phosphorylation, Dephosphorylated by PTPRJ at Tyr-204,