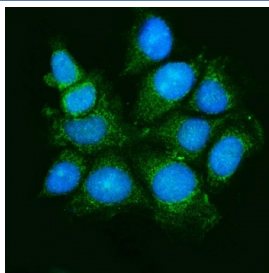


ASK1 Antibody / MAP3K5 (RQ6568)

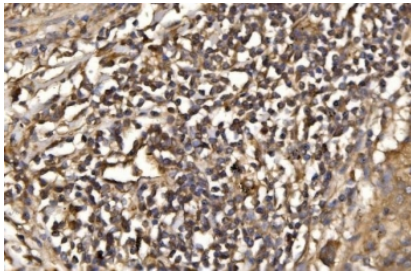
Catalog No.	Formulation	Size
RQ6568	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

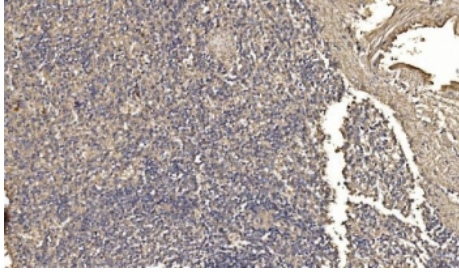
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q99683
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This ASK1 antibody is available for research use only.



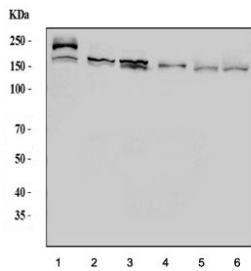
Immunofluorescent staining of FFPE human MCF7 cells with ASK1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



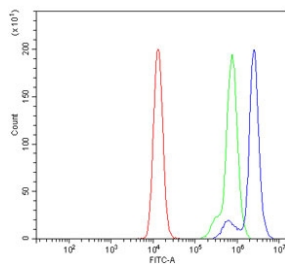
IHC staining of FFPE human lung cancer tissue with ASK1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human spleen tissue with ASK1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human RT4, 2) human HEL, 3) human HL60, 4) human ThP-1, 5) rat liver and 6) mouse liver lysate with ASK1 antibody. Predicted molecular weight ~155 kDa.



Flow cytometry testing of human Raji cells with ASK1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ASK1 antibody.

Description

Apoptosis signal-regulating kinase 1 (ASK1) also known as mitogen-activated protein kinase 5 (MAP3K5) is a member of MAP kinase family and as such a part of mitogen-activated protein kinase pathway. Mitogen-activated protein kinase (MAPK) signaling cascades include MAPK or extracellular signal-regulated kinase (ERK), MAPK kinase (MKK or MEK), and MAPK kinase kinase (MAPKKK or MEKK). MAPKK kinase/MEKK phosphorylates and activates its downstream protein kinase, MAPK kinase/MEK, which in turn activates MAPK. The kinases of these signaling cascades are highly conserved, and homologs exist in yeast, Drosophila, and mammalian cells. MAPKKK5 contains 1,374 amino acids with all 11 kinase subdomains. Northern blot analysis shows that MAPKKK5 transcript is abundantly expressed in human heart and pancreas. The MAPKKK5 protein phosphorylates and activates MKK4 (aliases SERK1, MAPKK4) in vitro, and activates c-Jun N-terminal kinase (JNK)/stress-activated protein kinase (SAPK) during transient expression in COS and 293 cells; MAPKKK5 does not activate MAPK/ERK.

Application Notes

Optimal dilution of the ASK1 antibody should be determined by the researcher.

Immunogen

An E. coli-derived human protein (amino acids A178-K1112) was used as the immunogen for the ASK1 antibody.

Storage

After reconstitution, the ASK1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.