

## [KD Validated] Anti-MAPKAPK2 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

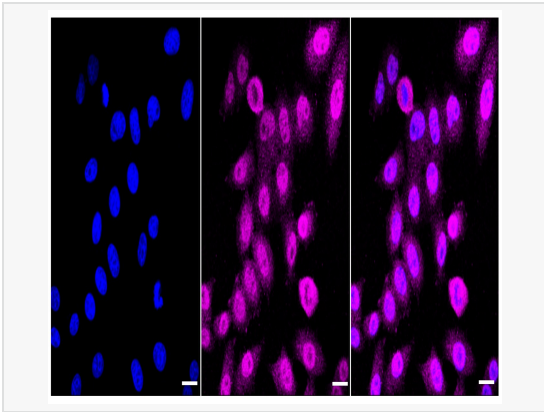
Catalog # R021582

### Product Information

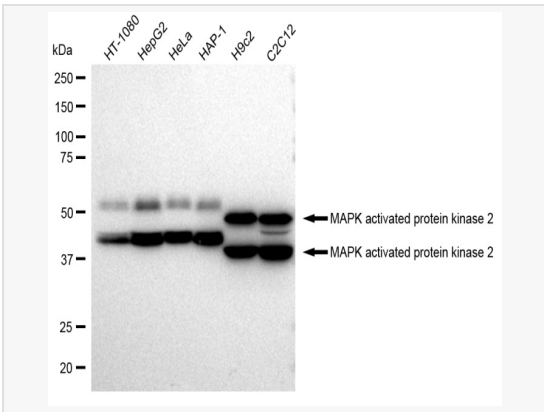
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	98F76O46
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human MAPKAP Kinase 2
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-MAPKAPK2 Rabbit mAb [98F76O46] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

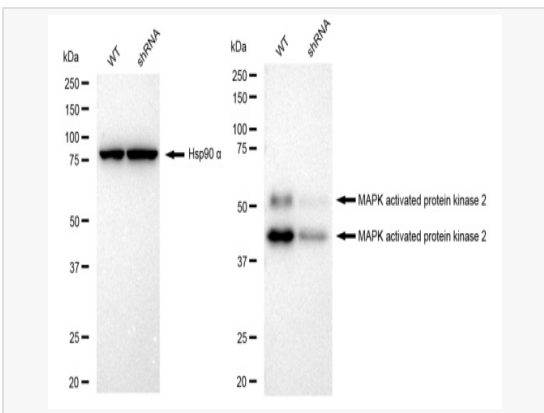
Synonyms	MAPKAPK2; MAPK Activated Protein Kinase 2; MK2; Mitogen-Activated Protein Kinase-Activated Protein Kinase 2; MAP Kinase-Activated Protein Kinase 2; MAPKAP Kinase 2; EC 2.7.11.1; MAPKAP-K2; MK-2; MAPK-Activated Protein Kinase 2; MAPKAPK-2; EC 2.7.11.
Calculated MW	Calculated MW: 46 kDa, Observed MW: 46 kDa
Uniprot ID	P49137
Gene ID	9261
Background	Its physiological substrate seems to be the small heat shock protein (HSP27/HSP25). In vitro can phosphorylate glycogen synthase at 'Ser-7' and tyrosine hydroxylase (on 'Ser-19' and 'Ser-40'). This kinase phosphorylates Ser in the peptide sequence, Hyd-X-R-X(2)-S, where Hyd is a large hydrophobic residue (By similarity).



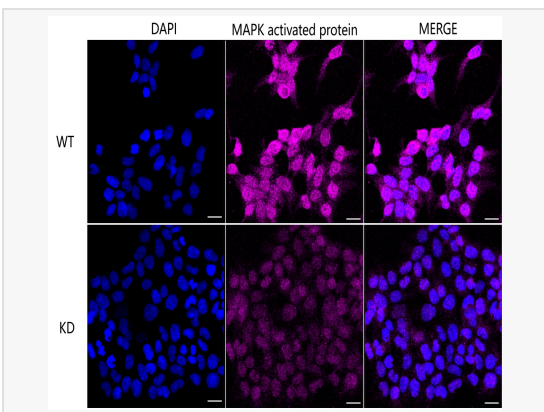
Immunocytochemical staining of HepG2 cells with MAPK activated protein kinase 2 antibody (R021582, 1:1,000). Nuclei were stained blue with DAPI; MAPK activated protein kinase 2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20  $\mu$ m.



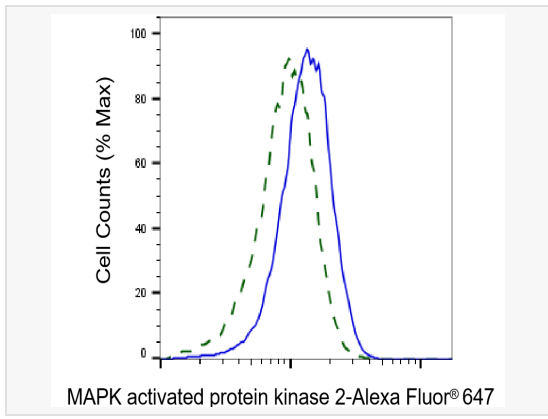
Western blotting analysis using MAPK activated protein kinase 2 antibody (61485). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with MAPK activated protein kinase 2 antibody (61485, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



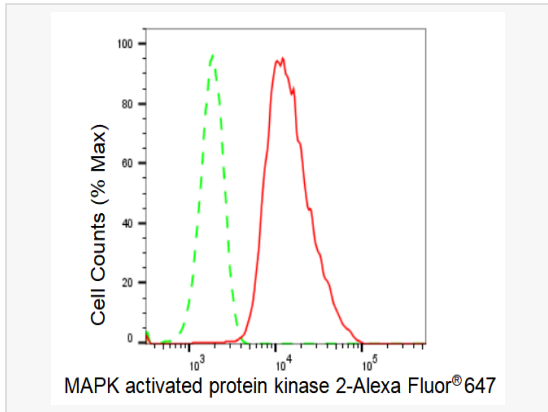
Western blotting analysis using MAPK activated protein kinase 2 antibody (R021582). MAPK activated protein kinase 2 expression in wild type (WT) and MAPK activated protein kinase 2 shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with MAPK activated protein kinase 2 antibody (R021582, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Immunocytochemical staining of HeLa cells using MAPK activated protein kinase 2 antibody (R021582, 1:1,000). Top panel: wild-type (WT); Bottom panel: MAPK activated protein kinase 2 shRNA knockdown (KD). Nuclei were stained blue with DAPI; MAPK activated protein kinase 2 was stained magenta with Alexa Fluor® 647. Scale bar, 20  $\mu$ m.



Validation of MAPK activated protein kinase 2 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with MAPK activated protein kinase 2 antibody (R021582, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of MAPK activated protein kinase 2 expression in HepG2 cells using MAPK activated protein kinase 2 antibody (R021582, 1:2,000). Green, isotype control; red, MAPK activated protein kinase 2.