

# Phospho-IKK alpha/beta (Ser176, Ser180) Recombinant Rabbit Monoclonal Antibody (7H17L17)

Product Details	
Size	100 µg
Species	Human
Expression System	Rabbit / IgG
Class	Recombinant Monoclonal
Type	Antibody
Clone	7H17L17
Conjugate	Unconjugated
Immunogen	Phosphopeptide corresponding to human IKK alpha/beta Ser176/180 (aa 173-182)
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage Conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2532498

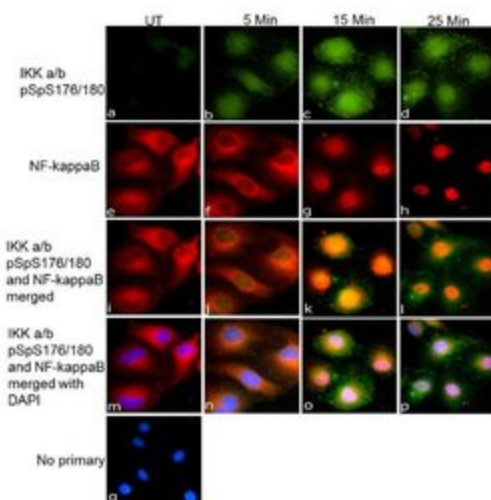
Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	1-2 µg/mL	-
Immunofluorescence (IF)	1-2 µg/mL	-

## Product Specific Information

This antibody is predicted to react with Dog, Rabbit, Pig, Mouse, Rat, Bovine and Goat.

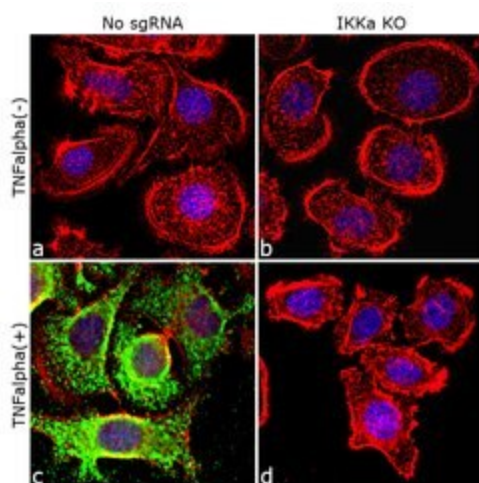
Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

## Advanced Verification Data



### Phospho-IKK alpha/beta (Ser176, Ser180) Antibody (701643)

Modulation of expression of target protein by cell treatment to demonstrate antibody specificity. Immunofluorescence analysis of IKK pS176/pS180 using Anti-IKK pS176/pS180 Recombinant Rabbit Monoclonal Antibody (Product # 701643) shows induced expression of IKK pS176/pS180 and subsequent translocation of NFkB to the nucleus of HeLa cells upon treatment with TNF alpha. Cell treatment validation info.



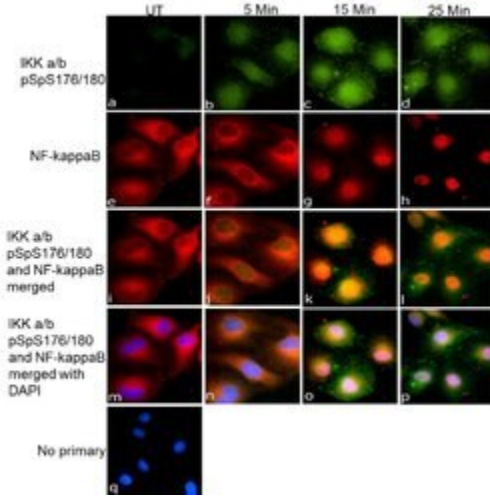
### Phospho-IKK alpha/beta (Ser176, Ser180) Antibody (701643)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A decrease of intensity was observed in TNF alpha induced phosphorylation of IKK alpha/beta in IKK alpha knockout (KO) cell line compared to control cell line using Anti-Phospho-IKK alpha/beta (pS176/pS180) Recombinant Rabbit Monoclonal Antibody (Product # 701643). Knockout validation info.

## Product Images For Phospho-IKK alpha/beta (Ser176, Ser180) Recombinant Rabbit Monoclonal Antibody (7H17L17)

### Phospho-IKK alpha/beta (Ser176, Ser180) Antibody (701643) in IF

Time course showing induction of TNF- $\alpha$  signaling cascade upon treatment: Cellular localization of proteins in the NF- $\kappa$ B signaling pathway was detected upon treatment of HeLa cells with TNF- $\alpha$  (50 ng/mL) for 5, 10 and 25 min, respectively. Fixed and permeabilized cells were stained with Anti-IKK alpha/beta (pSpS176/180) Recombinant Rabbit Monoclonal Antibody (Product # 701643, 1  $\mu$ g/mL) or Anti-NF- $\kappa$ B Mouse Monoclonal Antibody (Product # 33-9900, 1  $\mu$ g/mL) and labeled with Goat anti-Rabbit IgG (H+L) Superclonal Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034, 0.4  $\mu$ g/mL, 1:2500) and Goat anti-Mouse IgG (H+L) Superclonal Secondary Antibody, Alexa Fluor® 647 conjugate (Product # A28181, 0.4  $\mu$ g/mL, 1:2500). Images show staining of phospho-IKK alpha/beta and NF- $\kappa$ B (panel a, e, i, m) in untreated cells. No significant basal levels of phosphorylated IKK alpha/beta (panel a; green) were detected. Treatment with TNF alpha led to an increase in the levels of phospho-IKK alpha/beta (panel b - d ; green) in the cytosol and the nucleus, and a corresponding translocation of NF- $\kappa$ B to the nucleus (panel f - h; red). The composite images are shown in panels i - l; green, red. Nuclei (blue) were stained using SlowFade® Gold Antifade Mountant with DAPI (Product # S36938, 1:50) and panel m - p; green, red represent the specific localization of the proteins with reference to DAPI. No background staining was observed in control cells with no primary antibody (panel q).



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