

# Phospho-IKK alpha/beta (Ser176, Ser180) Recombinant Polyclonal Antibody (7HCLC)

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Mouse
Host/Isotype	Rabbit / IgG
Expression system	Expi293
Class	Recombinant Polyclonal
Type	Antibody
Clone	7HCLC
Conjugate	Unconjugated
Immunogen	phosphopeptide corresponding to human IKK alpha (Ser176/180)
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_2532752

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunocytochemistry (ICC/IF)	1-2 µg/mL	-

## Product Specific Information

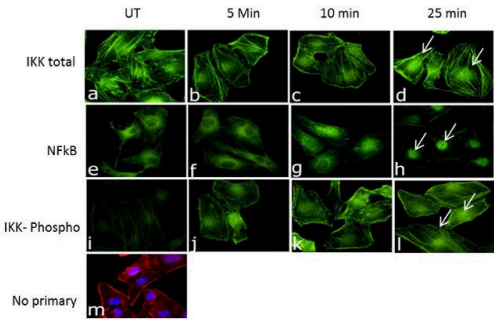
This antibody is predicted to react with Dog, Rabbit, Pig, Mouse, Rat, Bovine and Goat.

Recombinant rabbit polyclonal antibodies are unique offerings from Thermo Fisher Scientific. They are comprised of a selection of multiple different recombinant monoclonal antibodies, providing the best of both worlds - the sensitivity of polyclonal antibodies with the specificity of monoclonal antibodies - all delivered with the consistency only found in a recombinant antibody. While functionally the same as a polyclonal antibody - recognizing multiple epitope sites on the target and producing higher detection sensitivity for low abundance targets - a recombinant rabbit polyclonal antibody has a known mixture of light and heavy chains. The exact population can be produced in every lot, circumventing the biological variability typically associated with polyclonal antibody production.

Product Images For Phospho-IKK alpha/beta (Ser176, Ser180) Recombinant Polyclonal Antibody (7HCLC)

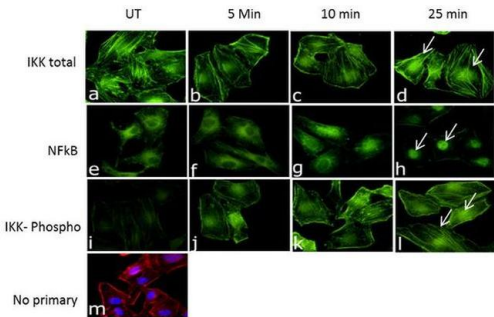
Phospho-IKK alpha/beta (Ser176, Ser180) Antibody (710676) in ICC/IF

Time course showing induction of the 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. Fixed and permeabilized cells were stained with Anti-IKK total Recombinant Rabbit Polyclonal Antibody (Product # 710719, 1  $\mu$ g/mL) or Anti-IKK alpha/beta (pS176/pS180) Recombinant Rabbit Polyclonal Antibody (Product # 710676, 1  $\mu$ g/mL) or Anti-NF- $\kappa$ B Recombinant Rabbit Polyclonal Antibody (Product # 710048, 1  $\mu$ g/mL) and labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034, 0.4  $\mu$ g/mL, 1:2500). Images showing cytoplasmic staining of IKK total and NF- $\kappa$ B (panel a & e; green) in untreated cells. No significant basal levels of phospho-IKK alpha/beta (panel i; green) were detected. Treatment with TNF- $\alpha$  led to a significant increase in the levels of IKK (panel b-d; green) and IKK alpha/beta (pS176/pS180) (panel j-l; green) in the cytosol, specifically at the perinucleus, and a corresponding translocation of NF- $\kappa$ B to the nucleus (panel f-h; green). No background staining was observed in control cells with no primary antibody (panel m). The nuclei (blue) were stained using SlowFade® Gold Antifade Mountant with DAPI (Product # S36938, 1:50). Cytoskeletal F-actin staining (red) was done using Alexa Fluor® 594 Phalloidin (Product # A12381, 1:200).



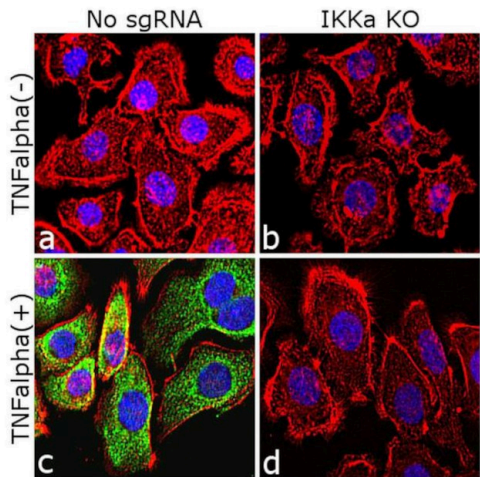
Phospho-IKK alpha/beta (Ser176, Ser180) Antibody (710676)

Detection of altered expression of the target protein and/or altered subcellular localization of the downstream target proteins by cell treatment demonstrates antibody specificity. Immunofluorescence analysis of IKK alpha/beta [pSpS 176/180] using IKK alpha/beta [pSpS 176/180] Recombinant Rabbit Polyclonal Antibody (Product # 710676), shows cytosolic and perinuclear expression of IKK alpha/beta [pSpS 176/180] (panel j-l; green) and corresponding translocation of NF- $\kappa$ B to the nucleus (panel f-h; green) in HeLa cells upon treatment with TNF- $\alpha$ . {TM}



Phospho-IKK alpha/beta (Ser176, Ser180) Antibody (710676)

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 (pS176pS180) Recombinant Rabbit Polyclonal Antibody (Product # 710676). {KO}



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Western Blot (1)

Life science alliance

Linear ubiquitination induces NEMO phase separation to activate NF-B signaling.

"710676 was used in Western Blotting to show that M1-ubiquitin chains induce phase separation of NEMO and the formation of NEMO assemblies in cells after exposure to IL-1."

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Year  
2023

Species  
Mouse

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