

## p65 Antibody

Catalog No: #32705

Package Size: #32705-1 50ul #32705-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

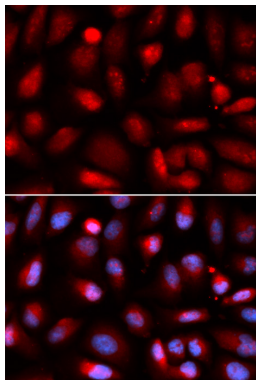
## Description

Product Name	p65 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total p65 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human p65.
Conjugates	Unconjugated
Target Name	p65
Other Names	RELA; MGC131774; NFKB3; p65;
Accession No.	Swiss-Prot:Q04206NCBI Gene ID:5970
SDS-PAGE MW	65KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

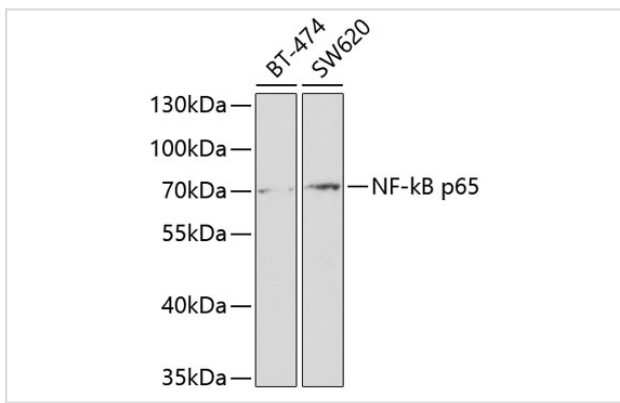
## Application Details

WB □ 1:500 - 1:2000 IHC □ 1:50 - 1:200 IF □ 1:50 - 1:200 IP □ 1:50 - 1:100

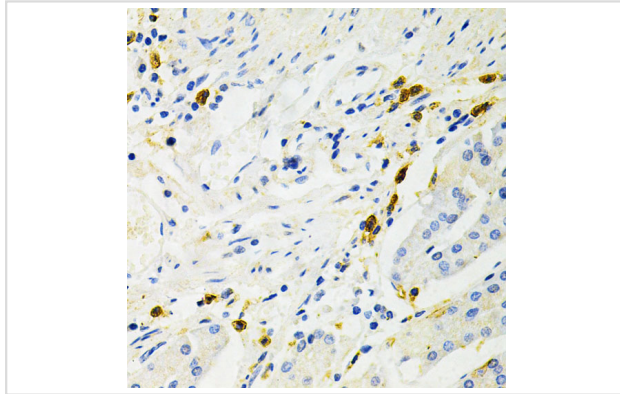
## Images



Immunofluorescence analysis of U2OS cells using NF-kB p65



Western blot analysis of extracts of various cell lines, using NF- $\kappa$ B p65 at 1:1000 dilution.



Immunohistochemistry of paraffin-embedded human stomach using NF- $\kappa$ B p65 at dilution of 1:200 (40x lens).

## Background

Transcription factors of the nuclear factor  $\kappa$  B (NF- $\kappa$ B)/Rel family play a pivotal role in inflammatory and immune responses (1,2). There are five family members in mammals: RelA, c-Rel, RelB, NF- $\kappa$ B1 (p105/p50), and NF- $\kappa$ B2 (p100/p52). Both p105 and p100 are proteolytically processed by the proteasome to produce p50 and p52, respectively. Rel proteins bind p50 and p52 to form dimeric complexes that bind DNA and regulate transcription. In unstimulated cells, NF- $\kappa$ B is sequestered in the cytoplasm by I $\kappa$ B inhibitory proteins (3-5). NF- $\kappa$ B-activating agents can induce the phosphorylation of I $\kappa$ B proteins, targeting them for rapid degradation through the ubiquitin-proteasome pathway and releasing NF- $\kappa$ B to enter the nucleus where it regulates gene expression (6-8). NIK and IKK $\alpha$  (IKK1) regulate the phosphorylation and processing of NF- $\kappa$ B2 (p100) to produce p52, which is then translocated to the nucleus (9-11).

NF- $\kappa$ B assembly with I $\kappa$ B, as well as its DNA binding and transcriptional activity, are regulated by p300/CBP acetyltransferases that principally target Lys218, Lys221 and Lys310 (12-14). This process is reciprocally regulated by histone deacetylases (HDACs); several HDAC inhibitors have been shown to activate NF- $\kappa$ B (12-14).

## Published Papers

el et., Di-Ras2 promotes renal cell carcinoma formation by activating the mitogen-activated protein kinase pathway in the absence of von Hippel-Lindau protein. In *Oncogene*. 2020 May;39 by Rao H, Li X, et al.. PMID: 32161311, (2020)

[PMID:32161311](https://pubmed.ncbi.nlm.nih.gov/32161311/)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.