# ANTIBODIES ONLINE

## Datasheet for ABIN965407 NF-kB p65 ELISA Kit

3 Images

1 Publication



### Overview

Quantity:	1 kit
Target:	NF-kB p65 (NFkBP65)
Reactivity:	Human
Method Type:	DNA-Binding ELISA
Application:	ELISA

### Product Details

Purpose:	NF-kB (p65) Transcription Factor Assay is a non-radioactive, sensitive method for detecting specific transcription factor DNA binding activity in nuclear extracts and whole cell lysates.
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Characteristics:	A 96 well enzyme-linked immunosorbent assay (ELISA) replaces the cumbersome radioactive electrophoretic mobility shift assay (EMSA). A specific double stranded DNA (dsDNA) sequence containing the NF-kB response element is immobilized onto the bottom of wells of a 96 well plate (see Figure 1 on page 4). NF-kB contained in a nuclear extract specifically binds to the NF- kB response element. NF-kB (p65) is detected by addition of a specific primary antibody directed against NF-kB (p65). A secondary antibody conjugated to HRP is added to provide a sensitive colorimetric readout at 450 nm. NF-kB (p65) Transcription Factor Assay detects human NF-kB (p65). It will not cross-react with NF-kB (p50).

### Target Details

Target:

NF-kB p65 (NFkBP65)

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/4 | Product datasheet for ABIN965407 | 03/28/2025 | Copyright antibodies-online. All rights reserved.

Target Details	
Alternative Name:	NF kB (p65) (NFkBP65 Products)
Background:	<ul> <li>The NF-kB/Rel family of transcription factors is comprised of several structurally related proteins that form homodimers and heterodimers and include p50/p105, p52/p100, RelA (p65), c-Rel/NF-kB [1]. Members of this family are responsible for regulating over 150 target genes, including the expression of inflammatory cytokines, chemokines, immunoreceptors and cell adhesion molecules. Because of this, NF-kB has often been called a 'central mediator of the human immune response' [2]. Acting as dimers, these transcription factors bind to DNA sequences, collectively called kB, sites thereby regulating expression of target genes. In most cells, Rel/ NF-kB transcription complexes are present in an inactive form in the cytoplasm, bound to an inhibitor I®B. Certain stimuli result in the phosphorylation, ubiquitination and subsequent degradation of IkB proteins thereby enabling translocation of NF-kB into the nucleus [3]. The most common Rel/NF-kB dimmer in mammals contains p50-RelA (p50/p65) heterodimers and is specifically called NF-kB. One of the target genes activated by NF-kB is that encoding IkBa. This feedback mechanism allows newly-synthesized IkBa to enter the nucleus, remove NF-kB from DNA and transport it back to the cytoplasm thereby restoring its inactive state. The importance of Rel/NF-kB transcription factors in human inflammation and certain diseases makes them attractive targets for potential therapeutics [4-6].</li> <li>Synonyms: NF-kB Transcription Factor Kit, p65 kit, EIA kit, NF-κB (p65) Transcription Factor Assay</li> </ul>
Pathways:	NF-kappaB Signaling, RTK Signaling, TCR Signaling, TLR Signaling, Fc-epsilon Receptor Signaling Pathway, Neurotrophin Signaling Pathway, Activation of Innate immune Response, Cellular Response to Molecule of Bacterial Origin, Hepatitis C, Toll-Like Receptors Cascades, S100 Proteins
Application Notes:	NF-KB (p65) Transcription Factor Assay is a non-radioactive, sensitive method for detecting specific transcription factor DNA binding activity in nuclear extracts and whole cell lysates. A 96 well enzyme-linked immunosorbent assay (ELISA) replaces the cumbersome radioactive electrophoretic mobility shift assay (EMSA). A specific double stranded DNA (dsDNA) sequence containing the NF-kB response element is immobilized onto the bottom of wells of a 96 well plate (see Figure 1 on page 4). NF-kB contained in a nuclear extract specifically binds to the NF-kB response element. NF-kB (p65) is detected by addition of a specific primary antibody directed against NF-kB (p65). A secondary antibody conjugated to HRP is added to provide a

sensitive colorimetric readout at 450 nm. NF-kB (p65) Transcription Factor Assay detects human NF-kB (p65). It will not cross-react with NF-kB (p50).

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/4 | Product datasheet for ABIN965407 | 03/28/2025 | Copyright antibodies-online. All rights reserved.

Application Details	
Comment:	Detection Kit Type: ELISA Kit
Plate:	Pre-coated
Restrictions:	For Research Use only
Handling	
Storage:	4 °C/-20 °C
Publications	
Product cited in:	Antognelli, Moretti, Frosini, Puxeddu, Sidoni, Talesa: "Methylglyoxal Acts as a Tumor-Promoting Factor in Anaplastic Thyroid Cancer." in: <b>Cells</b> , Vol. 8, Issue 6, (2019) (PubMed).

### Images

	ELISA
1 2 3 4 5 6 7 8 9 10 11 12	Image 1.
A @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @	
C @@@@@@@@@@@@@@@@@ D @@@@@@@@@@@@@@@@ PC - Positive Control Wells	
E (SG)()()()()()()()()()()()()()()()()()()	
©©©⊎⊎©©©©©©© ⊭©®©©©©©©©©	



### ELISA

**Image 2.** Schematic of the Transcription Factor Binding Assay.

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 3/4 | Product datasheet for ABIN965407 | 03/28/2025 | Copyright antibodies-online. All rights reserved.



#### **ELISA**

**Image 3.** Transcription factor assay absorbance of cell lysates isolated from stimulated (20 ng/mL TNFa for 30 min.) and non-stimulated HeLa cells demonstrating NF-?B (p50) activity.