

# CoraLite® Plus 488-conjugated NFkB1,p105,p50 Polyclonal antibody

Catalog Number: CL488-14220

## Basic Information

## Catalog Number:

CL488-14220

## Concentration:

1000 µg/ml

## Source:

Rabbit

## Isotype:

IgG

## Immunogen Catalog Number:

AG5458

## GenBank Accession Number:

BC051765

## GeneID (NCBI):

4790

## UNIPROT ID:

P19838

## Full Name:

nuclear factor of kappa light polypeptide gene enhancer in B-cells 1

## Calculated MW:

105 kDa

## Observed MW:

50 kDa, 105 kDa

## Purification Method:

Antigen affinity purification

## Recommended Dilutions:

IF/ICC: 1:50-1:500

FC (Intra): 0.80 µg per 10<sup>6</sup> cells in a 100 µl suspension

## Excitation/Emission maximum wavelengths:

493 nm / 522 nm

## Applications

## Tested Applications:

IF/ICC, FC (Intra)

## Species Specificity:

human, rat

## Positive Controls:

IF/ICC : HepG2 cells,

FC (Intra) : HepG2 cells,

## Background Information

NFkB is a pleiotropic transcription factor which is present in almost all cell types and is involved in many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NFkB is activated by various intra- and extracellular stimuli such as cytokines, oxidant free radicals, ultraviolet irradiation, and bacterial or viral products. NFkB is a family of transcription factors that consists of homo- and heterodimers of NFkB1/p50 and RelA/p65 subunits, and controls a variety of cellular events including development and immune responses. All members share a conserved amino terminus domain that includes dimerization, nuclear localization, and DNA binding regions, and a carboxy terminal transactivation domain. Serines 529 and 536 in the transactivation domain of RelA/p65 are phosphorylated in response to several stimuli including phorbol ester, IL1 alpha and TNF alpha as mediated by Ikb kinase and p38 MAPK. Phosphorylation of serines 529 and 536 is critical for RelA/p65 transcriptional activity. Activated NFkB translocates into the nucleus and stimulates the expression of genes involved in a wide variety of biological functions. Inappropriate activation of NFkB has been associated with a number of inflammatory diseases while persistent inhibition of NFkB leads to inappropriate immune cell development or delayed cell growth. NFkB1 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p105 and generation of p50 by a cotranslational processing. This antibody can bind both p105 and p50 isoforms of NFkB1.

## Storage

## Storage:

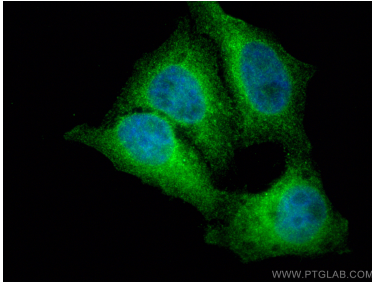
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

## Storage Buffer:

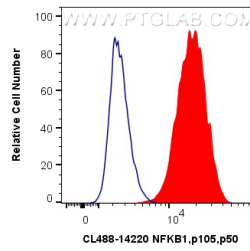
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Coralite® Plus 488 NFKB1,p105,p50 antibody (CL488-14220) at dilution of 1:200.



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.8 ug Coralite® Plus 488 Anti-Human NFKB1,p105,p50 (CL488-14220) (red), or 0.8 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).