

Product Data Sheet

Alexa Fluor® 488 anti-NF-κB p50

Catalog # / Size: 616704 / 100 µg

Clone: 4D1

Isotype: Mouse IgG1, κ

Immunogen: recombinant full-length human NF-κB p50

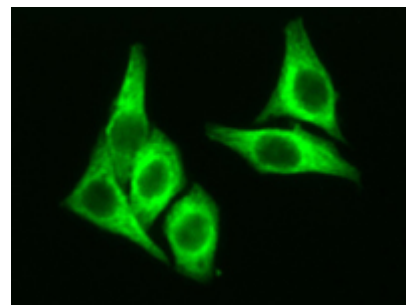
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.

Formulation: This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. Final antibody concentration is 0.5 mg/ml.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



HeLa cells were stained with Alexa Fluor® 488 anti-NF-κB p50 (4D1) mouse mAb and examined on a fluorescent scope.

Applications:

Applications: IF

Recommended Usage: For immunofluorescent staining applications, a concentration range of 1-4 µg/ml is recommended. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

** Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

Application Notes: Additional reported applications (for the relevant formats) include: immunofluorescence¹ on the Amnis ImageStream 100 Imaging Flow Cytometer.

Application References:

1. Huang F, *et al.* 2007. *J. Immunol.* 179:6504. PubMed
2. Cao YA, *et al.* 2008. *J. Biol. Chem.* 283:15309. PubMed
3. Liu Z, *et al.* 2011 *Mol Cancer Res.* 9:507. PubMed.

Description: NF-κB/p50 (nuclear factor kappa light chain enhancer in B cells p50, NF-κB1) is a member of the Rel/dorsal family. This ubiquitously expressed nuclear protein is one subunit of the NF-kappa B complex consisting of a 65 kD transactivating subunit and a 50 kD DNA binding subunit. Both subunits are derived from larger precursor proteins. NF-κB acts as a transcriptional activator and was originally identified as an activator of kappa light chain in B cells. NF-κB/p50 is bound (with p65) to IκB inhibitor in cytoplasm in inactive form. Phosphorylation of IκB releases and NF-κB which goes to the nucleus to activate gene expression. NF-κB can be activated with LPS, TNF-α, phorbol ester, or IL-1. The 4D1 monoclonal antibody reacts with human NF-κB p50 and has been shown to be useful for Western blotting.

Antigen References:

1. Baldwin AS, *et al.* 1996. *Annu. Rev. Immunol.* 14:649 (review).
2. Chen F, *et al.* 1999. *Clin. Chem.* 45:7 (review).

Related Products: **Product**
 Alexa Fluor® 488 Mouse IgG1, κ Isotype Ctrl (ICFC)

Clone
 MOPC-21

Application
 ICFC, IF



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biollegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.