

Spark PLUS B488™ anti-NF-κB p65 Phospho (Ser529) Antibody

Catalog# / Size	614157 / 25 tests 614158 / 100 tests
Clone	A21012B
Regulatory Status	RUO
Other Names	NF-κB p65, RelA, P65, NFKB3, Nuclear Factor NF-Kappa-B P65 subunit, Transcription Factor P65, NF-Kappa-B Transcription Factor P65, RELA Proto-Oncogene NF-KB subunit
Isotype	Mouse IgG1, κ
Description	NF-κB p65, also known as NFKB3 and RelA, is one of five members of the nuclear factor κB (NF-κB)/Rel family. Inactive NF-κB p65 is sequestered in the cytoplasm as a complex with IκB inhibitory proteins. Upon activation of the NF-κB pathway, IκB proteins are degraded, thus releasing NF-κB p65 to the nucleus. Binding of NF-κB p65 to transcriptional cofactors is induced via phosphorylation on serines 276, 529, 536, and 471. As a transcription factor, NF-κB p65 is vital to cell proliferation, immune response, survival, and apoptosis. Through regulation of chondrocyte and osteoblast differentiation and survival, NFκB p65 has a crucial role in skeletal development. Overexpressed in several cancers, NF-κB p65 functions as an oncogene and has been implicated in tumorigenesis, metastasis, tumor angiogenesis, and chemoresistance.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Synthetic peptide corresponding to human NF-κB p65 phosphorylated at serine 529
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Spark PLUS B488™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Phos™ Perm Buffer in Whole Blood Protocol. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Spark PLUS B488™ has a maximum excitation of 499 nm and a maximum emission of 520 nm.
Excitation Laser	Blue Laser (488 nm)
Additional Product Notes	For intracellular flow cytometry staining (ICFC), we recommend True-Phos™ Perm Buffer (Cat. No. 425401) for permeabilization.

Antigen Details

Structure	NF- κ B p65 is a 551 amino acid protein with a predicted molecular weight of 60 kD.
Distribution	Ubiquitously expressed/ Cytoplasm and Nucleus
Function	Transcription, RAS pathway, host-virus interaction, oncogene
Interaction	NF-kappa-B, TLE5, TLE1, TP53BP2, GSK3B, MAP3K14, HDAC3, AKIP1, FOXP3
Biology Area	Cell Biology, Immuno-Oncology, Immunology, Innate Immunity, Transcription Factors
Molecular Family	Innate Immune Signaling, Phospho-Proteins, Protein Kinases/Phosphatase
Antigen References	1. Giridharan S and Srinivasan M. 2018. <i>J Inflamm Res.</i> 11:407-419. 2. Ren C, <i>et al.</i> 2022. <i>Cell Death Differ.</i> 29:381-392. 3. Yu S, <i>et al.</i> 2020. <i>FEBS Lett.</i> 594:13681378.
Gene ID	5970

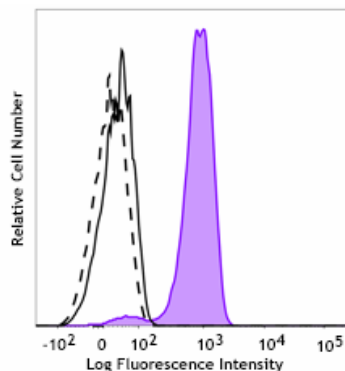
Related Protocols

- [Intracellular Staining With True-Phos™ Perm Buffer in Cell Suspensions Protocol](#)
- [Intracellular Staining With True-Phos™ Perm Buffer in Whole Blood](#)

Other Formats

PE anti-NF- κ B p65 Phospho (Ser529), Purified anti-NF- κ B p65 Phospho (Ser529), Alexa Fluor® 647 anti-NF- κ B p65 Phospho (Ser529), Spark PLUS B488™ anti-NF- κ B p65 Phospho (Ser529)

Product Data



Peripheral blood mononuclear cells either untreated (negative control, open histogram), or treated with Cell Activation Cocktail™ (without Brefeldin A) (Cat. No. 423301) (positive control, filled histogram) were fixed and permeabilized using True-Phos™ Perm Buffer (Cat. No. 425401), and then intracellularly stained with Spark PLUS B488™ anti-NF- κ B p65 Phospho (Ser529) (clone A21012B). Unstained cells for both untreated and treated groups are represented in the dashed histogram.

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