Anti-Human pNFkBp65 [S529]-166Er

Pathologist-Verified Clone for Imaging Mass Cytometry™

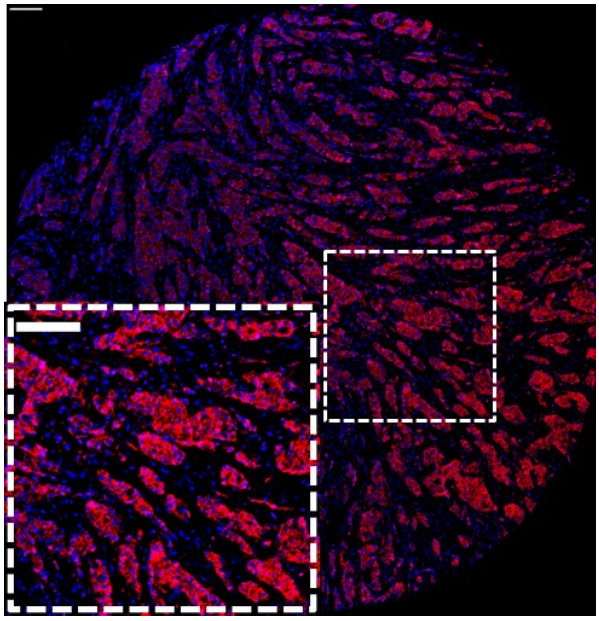
Catalog: 3166026D
Package size and concentration: 25 µg, 0.5 mg/mL
Storage: Store at 4 °C. Do not freeze.
Reactivity: Human
Clone: K10-895.12.50
Isotype: Mouse IgG2b
Formulation: Antibody stabilizer with 0.05% sodium azide
Application: IMC-Paraffin

Technical Information

Application: The metal-tagged antibody is designed and formulated for the application of Imaging Mass Cytometry (IMC™) using the Fluidigm Hyperion™ Imaging System on formalin-fixed, paraffin-embedded (FFPE) tissue sections.

Quality control: Each lot of conjugated antibody is quality control-tested by Imaging Mass Cytometry on tissue sections.

Recommended concentration: For optimal performance it is recommended that the antibody be titrated for the desired application. Suggested initial dilution range:
IMC-Paraffin: 1:25 to 1:100



Human breast carcinoma (FFPE) stained with 166Er-anti-pNFκBp65 [S529] (K10-895.12.50) at a dilution of 1:50 (red pseudocolor) and iridium DNA intercalator (blue pseudocolor). Heat-mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. Scale bar size = 100 µm.

Description

NFκB-p65, also known as RelA, is a subunit of the NFκB transcription factor complex, an important mediator of inflammatory and immune responses. NFκB-p65 is normally sequestered in the cytoplasm through an interaction with IκB. NFκB translocates to the nucleus when IκB is degraded in response to stimuli such as TNFa. In mammals, there are five members of the NFκB family that can form heterodimers in the nucleus to activate different sets of genes. The Ser529 site on the C-terminal transactivation domain of NFκB-p65 is often phosphorylated in response to the same stimuli that result in degradation of IκB. This phosphorylation improves the transcriptional activity of p65 but does not affect nuclear translocation or DNA binding. The K10-895.12.50 monoclonal antibody recognizes the phosphorylated serine (pS529) of human NF-kB p65 subunit.

References

Chang, Q. et al. "Staining of frozen and formalin-fixed, paraffin-embedded tissues with metal-labeled antibodies for imaging mass cytometry analysis." *Current Protocols in Cytometry* 82 (2017): 12.47.1–12.47.8.

Giesen, C. et al. "Highly multiplexed imaging of tumor tissues with subcellular resolution by mass cytometry." *Nature Methods* 11 (2014): 417–22.