

Anti-Human CD16-146Nd

Pathologist-Verified Clone for Imaging Mass Cytometry

Catalog: 3146020D

Package size and concentration: 25 µg, 0.5 mg/mL

Storage: Store at 4 °C. Do not freeze.

Reactivity: Rat, Human

Clone: EPR16784

Isotype: Rabbit IgG

Formulation: Antibody stabilizer with 0.05% sodium azide

Application: IMC paraffin, IMC frozen

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) and frozen 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

IMC frozen: 1:50 to 1:200

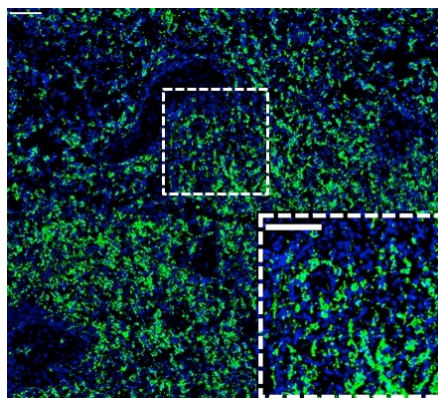
Description

CD16, also known as low-affinity IgG receptor III (FcγRIII), is a polypeptide-anchored transmembrane protein. The CD16a isoform is expressed on the surface of NK cells, activated monocytes, macrophages, and placental trophoblasts. CD16a mediates antibody-dependent cellular cytotoxicity (ADCC) and other antibody-dependent responses, such as phagocytosis. The CD16b isoform is expressed specifically on neutrophils. This clone was derived with a CD16a immunogen that has high homology to CD16b, and it is expected to recognize both isoforms.

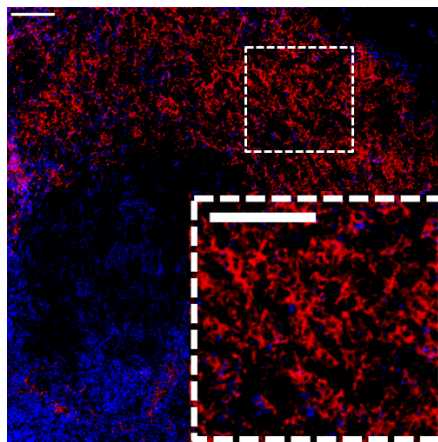
References

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.



Human spleen (FFPE) stained with 146Nd-anti-CD16 (EPR16784) at a dilution of 1:50 (green pseudocolor) and iridium DNA intercalator (blue pseudocolor). Heat-mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. Scale bar size = 100 µm.



Human frozen spleen stained with 146Nd-anti-CD16 (EPR16784) at a dilution of 1:100 (red pseudocolor) and iridium DNA intercalator (blue pseudocolor). Tissue section was fixed in 4% paraformaldehyde for 30 minutes at 4 °C. Scale bar size = 100 µm.

For technical support visit techsupport.fluidigm.com. | For general support visit fluidigm.com/support.

For Research Use Only. Not for use in diagnostic procedures.

Information in this publication is subject to change without notice. **Safety data sheet information:** fluidigm.com/sds. **Patent and license information:** fluidigm.com/legal/notices. **Limited Use Label License:** The purchase of this Fluidigm Instrument and/or Consumable product conveys to the purchaser the limited, nontransferable right to use with only Fluidigm Consumables and/or Instruments respectively except as approved in writing by Fluidigm. **Trademarks:** Fluidigm, the Fluidigm logo, Hyperion, Imaging Mass Cytometry, and IMC are trademarks and/or registered trademarks of Fluidigm Corporation in the United States and/or other countries. All other trademarks are the sole property of their respective owners. © 2019 Fluidigm Corporation. All rights reserved. 11/2019