Anti-Human Met-167Er

Pathologist-Verified Clone for Imaging Mass Cytometry™

Catalog: 3167020D
Package size and concentration: 25 µg, 0.5 mg/mL
Storage: Store at 4 °C. Do not freeze.
Reactivity: Human

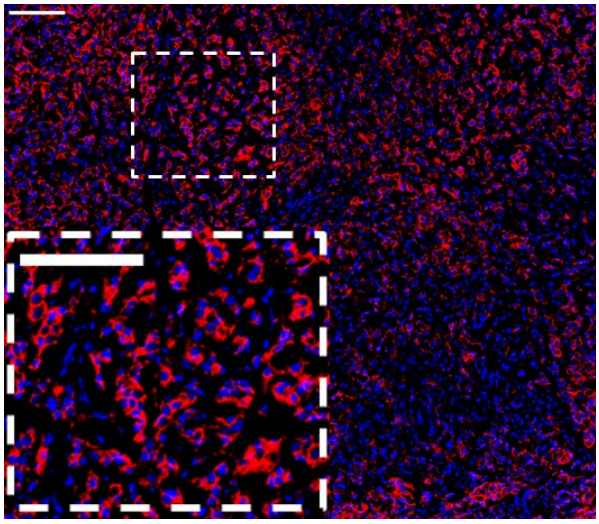
Clone: D1C2
Isotype: Rabbit IgG
Formulation: Antibody stabilizer with 0.05% sodium azide
Application: IMC-Paraffin

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 167Er-anti-Met (D1C2) 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

The c-Met receptor, also called hepatocyte growth factor receptor (HGFR), is a member of the receptor tyrosine kinase family. It consists of an extracellular ligand-binding domain and an intracellular kinase domain. The receptor is activated by ligand binding followed by dimerization and phosphorylation within the intracellular kinase domains. Structurally, the extracellular domain is composed of a semaphorin (sema) domain, a cysteine-rich hinge known as plexin, semaphorin and integrin (PSI) domain followed by four immunoglobulin-like domains. In humans, HGF is the only known activating ligand of c-Met that induces cellular responses such as cell proliferation, cell survival, cell motility and invasion. In healthy tissues, c-Met signaling is implicated in embryonic development, wound healing and liver regeneration. In human malignancies, c-Met can be deregulated by protein overexpression, gene amplification, somatic or germline mutations or the production of HGF-dependent autocrine loops.

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.