Anti-BRCA1 (MS110)-172Yb

Pathologist-Verified Clone for Imaging Mass Cytometry™

Catalog number: 3172030D
Package size and concentration: 25 µg, 0.5 mg/mL
Clone: MS110
Isotype: Mouse IgG1
Pathologist-verified on: Human FFPE
Fluidigm tested on: Human FFPE, Mouse FFPE

Technical Information

Description: BRCA1 (breast cancer type 1 susceptibility protein) is an important member of the DNA repair pathway, and it functions as a tumor suppressor. It interacts with a wide range of proteins involved in the detection of damaged DNA and activation of appropriate repair pathways, including the Mre11-Rad50-Nbs1 (MRN) complex, which is responsible for homologous recombination in the repair of DNA double-stranded breaks. BRCA1 also plays a role in cell cycle regulation, where decreased expression of BRCA1 leads to cell cycle arrest through p53 and p21 genes. BRCA1 and BRCA2 are frequently mutated in cases of hereditary breast and ovarian cancer.

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

References


Safety

Use standard laboratory safety protocols. Read and understand the safety data sheets (SDSs) before handling chemicals. To obtain SDSs, go to fluidigm.com/sds and search for the SDS using either the product name or the part number.

Human breast carcinoma (FFPE) stained with 172Yb-anti-BRCA1 (MS110) 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.