

CD117 [YR145] - 155Gd

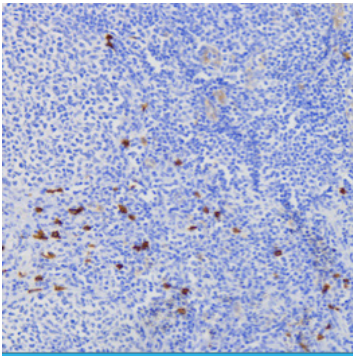
Catalog: 715501

Clone: YR145

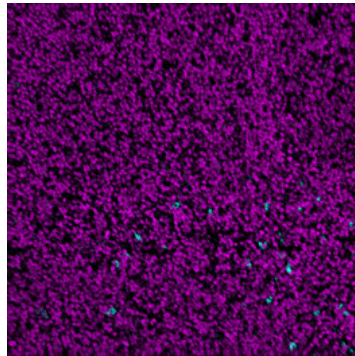
Isotype: Rabbit IgG

Reactivity: Human*

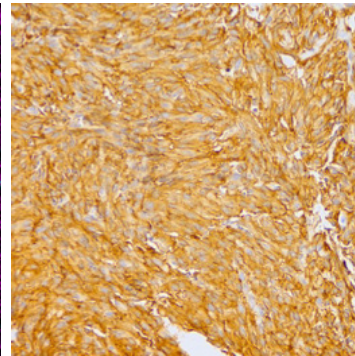
Application: MIBI-FFPE

Storage: Supplied in antibody stabilizer with 0.05% sodium azide. Store at 4°C


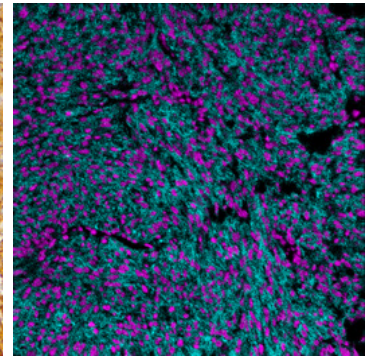
IHC: CD117 staining of FFPE human tonsil



MIBI: CD117 staining (cyan) of FFPE human tonsil, costained with dsDNA (magenta)



IHC: CD117 staining of FFPE human gastrointestinal stromal tumor



MIBI: CD117 staining (cyan) of FFPE human gastrointestinal stromal tumor, costained with dsDNA (magenta)

Background

CD117 (c-Kit, stem cell growth factor receptor (SCFR)), is a receptor tyrosine kinase protein activated by stem cell factor (c-Kit ligand) leading to cell survival, proliferation, and differentiation. CD117 is expressed on pluripotent hematopoietic progenitor cells, mast cells, and can be used for tumor identification, for example, for diagnosis of gastrointestinal stromal tumors (GIST). Mutations within the gene are associated with GIST, melanoma, acute myeloid leukemia (AML), and mast cell disease. Many approved kinase inhibitors inhibit CD117's kinase activity and additional drug development is on-going. CD117 activation leads to mobilization of progenitor cells from the bone marrow to the bloodstream.

Validation

Each lot of conjugated antibody is quality control tested by staining tissue following the MIBI Staining Protocol optimized for the applicable tissue format with subsequent MIBIscope analysis using the appropriate positive and negative tissue field of views. These results are pathologist verified.

Recommended Usage

Human FFPE: 1:100 dilution. For optimal results, the antibody should be titrated for each desired application.

References

Abbaspour Babaei M., Kamalidehghan B., Saleem M., Huri H.Z., Ahmadipour F. Receptor tyrosine kinase (c-Kit) inhibitors: a potential therapeutic target in cancer cells. *Drug Des Devel Ther.* 2016; **10**:2443-59.

* Conjugate tested on human tissue.