Anti-c-Kit Antibody [PD00-24]

IRS013



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	mIHC
Molecular Wt:	Predicted band size: 110 kDa
Clone number:	PD00-24
Description:	CD117 is a 145-160 kDa cell membrane protein encoded by the c-kit proto-oncogene. CD117 is required for the development and growth of a large number of cells expressing this protein. The cells (particularly the mast cells) show a strong membrane as well as cytoplasmic staining. CD117 moreover is expressed in various epithelia (breast, swear glands and salivary glands, renal tubular cells, thyroid follicular cells), usually showing a weaker, cytoplasmic reaction. CD117 is also demonstrated in testicular and ovariant interstitial cells, in neurons of the central nervous system (cerebellum, hippocampus, and dorsal horn of the spinal cord), and in immature myeloid cells. CD117 does not occur in smooth muscle cells. Family of transmembrane proteins essential for the regulation of cell growth and maintenance. When a growth factor is bound to its receptor, the latter is phosphorylated and begins a cascade of intracytoplasmic signals. Cells involved in the generation of electrical pacemaker activity for gastrointestinal motility. The cells are considered to be the origin of gastrointestinal stromal tumours. CD117 is of great importance for the classification of mesenchymal tumours of the gastrointestinal tract (including the mesentery). CD117 may also be used for classification of germinal cell tumours, as seminoma/dysgerminoma stains in the majority of cases, showing a strong membranous staining, while embryonal carcinoma stains in a small proportion of cases, with a weaker, membranous reaction. An panel for distinguishing seminoma from embryonal carcinoma should include CD30. Also in the identification of mast cell neoplasms CD117 has a potential. Appendix is recommended as positive and negative tissue controls for CD117.
lmmunogen:	Synthetic peptide within Human c-Kit aa 950-976.
Positive control:	Human lung cancer tissue, human tonsils tissue.
Subcellular location:	Cell membrane; Cytoplasm.
Database links:	SwissProt: P10721 Human
Recommended Dilutions: mIHC	1:100
Storage Buffer:	PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Store at +4 $^\circ\!C$ after thawing. Aliquot store at -20 $^\circ\!C$ or -80 $^\circ\!C$. Avoid repeated freeze / thaw cycles.
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Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn



Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

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Images

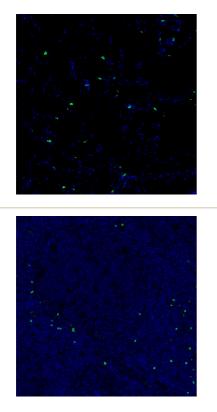


Fig1: mlHC analysis of human lung cancer tissue (Formalin/PFAfixed paraffin-embedded sections) with Rabbit anti-c-Kit antibody (IRS013) at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95°C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

Fig2: mIHC analysis of human tonsils tissue (Formalin/PFA-fixed paraffin-embedded sections) with Rabbit anti-c-Kit antibody (IRS013) at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95°C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. Harris KS. et. al. CD117/c-kit defines a prostate CSC-like subpopulation driving progression and TKI resistance. Sci Rep. 2021 Jan
- Russkamp NF. et. al. Anti-CD117 immunotherapy to eliminate hematopoietic and leukemia stem cells. Exp Hematol. 2021 Mar

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