

Na/K-ATPase [D4Y7E] - 176Yb

Catalog: 717601

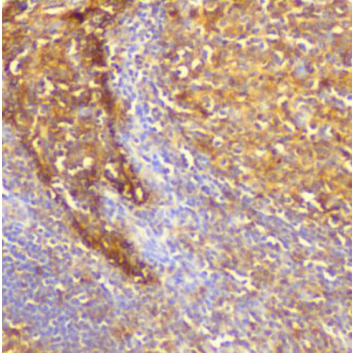
Clone: D4Y7E

Isotype: Rabbit IgG

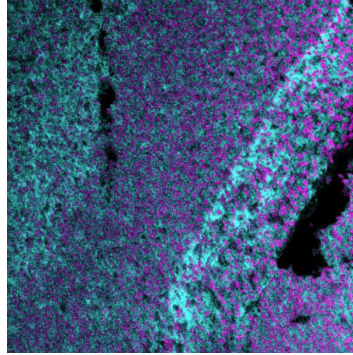
Reactivity: Human*

Application: MIBI-FFPE

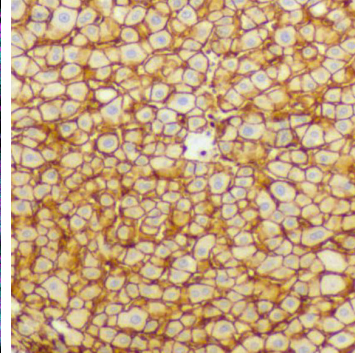
Storage: Supplied in antibody stabilizer with 0.05% sodium azide. Store at 4°C



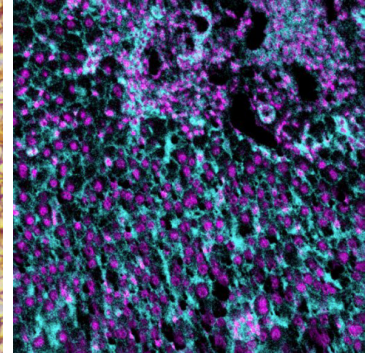
IHC: Na/K-ATPase antibody staining of FFPE human tonsil



MIBI: Na/K-ATPase antibody staining (cyan) of FFPE human tonsil, counterstained with dsDNA (magenta)



IHC: Na/K-ATPase antibody staining of FFPE human liver



MIBI: Na/K-ATPase antibody staining (cyan) of FFPE human liver, counterstained with dsDNA (magenta)

Background

Na/ K-ATPase is a widely expressed membrane protein that functions as an ion pore, exporting sodium and importing potassium. The alpha, beta and FXYD subunits combine to form Na/K-ATPase. The regulation of intracellular concentrations of various ions control signaling pathways and other enzymatic processes, such as neurotransmitter re-uptake in astrocytes. Na/K-ATPase activity is regulated through multiple phosphorylation sites. Mutations in the alpha subunit of Na/K-ATPase, in particular, have been shown to adversely impact ionic homeostasis, contributing to neurological disease.

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.

Recommended Usage

Human FFPE: 3.5 ug/mL dilution. For optimal results, the antibody should be titrated for each desired application.

References

Clausen, M.V., Hilbers, F. and Poulsen H. (2017) The Structure and Function of the Na,K-ATPase Isoforms in Health and Disease. *Front. Physiol.* **8**:371. doi: 10.3389/fphys.2017.00371

* Conjugate tested on human tissue.