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Data Sheet: HypoxyprobeTM Red APC MAb

Product Details

Description: Each vial of HP-RedAPC-MAb contains anti-pimonidazole antibody dissolved in

200 microliters of stabilized buffer at a concentration of approximately 0.50

mg/mL.

Format: Fluorophore conjugated IgG1 mouse monoclonal antibody (clone 4.3.11.3)

Product Form: Buffer:

Product Type: Purified IgG₁ prepared by affinity chromatography Proprietary formulation

containing stabilizers.

Fluorophore- Protein Ratio: ≥ 1 APC moiety per IgG₁ molecule.

Fluorescence: Excitation 633 nm; Emission max 660 nm. Allophycocyanin has strong red

fluorescence.

Specificity: Mouse IgG1 monoclonal antibody conjugated to Allophycocyanin (APC)

fluorophore (HP-RedAPC-MAb) Pimonidazole forms adducts with thiol containing proteins at pO2 \leq 10 mm Hg. HP- RedAPC-MAb binds to

pimonidazole adducts in hypoxic cells in tissues and in culture.

Applications: Flow cytometry on isolated cells and immunofluorescence on frozen tissue

sections. HP-APC-MAb is an alternative to FITC-labeled anti-pimonidazole

mouse monoclonal antibody¹.

Target Species: All

Please see <u>www.hypoxyprobe.com</u> for details of the Hypoxyprobe system for detecting cell and tissue hypoxia.

1/20-1/200 dilution is suggested but users should optimize in their system using appropriate negative and positive controls. Image above: human tumor xenograft hypoxia (red); 1/200 dilution of HP-RedAPC overnight at 4°C on frozen section. (Courtesy of Hans Peters, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands.)

^{1.} Jankovic B, Aquino-Parsons C, Raleigh JA, et al. Comparison between pimonidazole binding, oxygen electrode measurements, and expression of endogenous hypoxia markers in cancer of the uterine cervix. Cytometry B Clin Cytom 2006; 70: 45-55.