**Mouse mAb**

**soluble adenylyl cyclase (sAC, ADCY10)**

**R21**

50µL
(10 western blots)

cat#: R21.002

**Applications** | **Species Cross-Reactivity** | **Molecular Weight** | **Isotype**
---|---|---|---
W, IP, IF-IC | H, M, R, B, D, Mk | 50, 180 kDa | Mouse IgG1

**Background:**
Soluble adenylyl cyclase (sAC) is a widely distributed adenylyl cyclase, distinct from the hormonally responsive transmembrane adenylyl cyclase (tmACs) isoforms. Distinct from tmACs, which are at the plasma membrane, sAC is distributed throughout the cell cytoplasm and can reside within organelles, including mitochondria, nuclei and centrioles. sAC is regulated by bicarbonate, calcium and cellular ATP levels, and it is thought to serve as a metabolic and intracellular pH sensor.

**Specificity/Sensitivity:**
R21 is a mouse monoclonal antibody directed against amino acids 203-216 (EIESVPDQRAVKVN) of human sAC protein.

**Source/Purification:**
R21 is produced in hybridoma cells growing in media containing low IgG bovine serum and purified over Protein G affinity resin.

**Storage:**
Supplied in 50 mM Tris-HCl (pH 7.5), 150 mM NaCl, 0.01% sodium azide, 0.05% BSA, 40% glycerol. Store at 4°C. For longer-term storage, aliquots can be stored at -20°C, but should not undergo repeated freeze-thaws.

* Species cross-reactivity is determined by western blot and immunocytochemistry
* Anti-mouse secondary antibodies must be used to detect this antibody

**Recommended Antibody Dilutions:**
- Western Blotting: 1:2,000
- Immunoprecipitation
- IF-IC: 1:50-100

These dilutions are meant as a guideline as different machines and techniques may alter antibody dilution.

**Background References:**

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