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AP05075PU-N Polyclonal Antibody to BAPTA - Purified

Alternate names: N, N', N'-tetraacetic acid, bis(o-aminophenoxy)-ethane-N, calcium channel chelator

Quantity: 0.1 mg

Concentration: Lot specific

Background: BAPTA (bis(o-aminophenoxy)-ethane-N,N,N',N'-tetraacetic acid)is a calcium channel chelator. BAPTA has spawned many of the most familiar fluorescent indicators for calcium and other ions (1).BAPTA and its analogs including BAPTA-AM have proved most critical in cell physiology where they have been essential in defining the mechanisms underlying intra or intercellular calcium homeostasis (2).and calcium dependant exocytosis (3).BAPTA and its analogs may also find application in diseases which a disturbed regulation of excitatory neurotransmitter release and uptake plays a role (4). The rabbit BAPTA antibody recognizes a 69 kDa monomer and 138 kDa dimer by western blot. The immunogen used was a recombinant BAPTA-KLH.

Host / Isotype: Rabbit / IgG

Format: **State:** Liquid purified Ig (0.2µm sterile filtered)
Buffer System: Phosphate buffered saline with 0.08% sodium azide

Applications: Western Blot: 1 - 10 µg/ml.
Immunofluorescence.
Immunoprecipitation.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody reacts to BAPTA.
Species: Human, Rat, Mouse, Chicken.
Other species not tested.

Storage: Store the antibody at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:
1. Tymianski, M. et al. (1997) Cell Calcium 22: 111 - 120
2. Roberts, W. M. (1993) Nature 363: 74 - 76
3. Kline, D. at al. (1992) Dev. Bio. 149: 80 - 89

Pictures: The regional distribution of intracellular BAPTA in neuronal and nonneuronal cells after loading with BAPTA/AM into mixed cultures is detected by BAPTA antibody. Cultures were loaded with BAPTA/AM, fixed with EDC and processed for immunofluorescence staining. BAPTA staining illustrating non-selective loading of BAPTA/AM into the different cells (including neurons) in the cultures.