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Schillerstr. 5

AP05008PU-N Polyclonal Antibody to Bromodeoxyuridine / BrDU - Purified

Quantity: 0.25 mg
Concentration: Lot specific

Background: Bromodexyuridine (BrdU) is a thymidine analog which is selectively incorporated into

the DNA of proliferating cells to provide a marker for the DNA being replicated. The number of proliferating cells can then be detected in cell lysates, tissue sections or suspensions using an antibody specific for the BrdU. Previous methods of detecting DNA included the use of [3H]-thymidine which would be incorporated into the DNA and could then the DNA could be quantified by autoradiography or scintillation counting. These methods are more difficult and require more cleanup due to the radioactive material. An immunohistochemical assay provides a much simpler and

cleaner method for detecting DNA in cells.

Host / Isotype: Sheep / IgG

Immunogen: Bromodeoxyuridine conjugated to Helix Pomatia Haemocyanin.

Format: State: Liquid purified IgG fraction (0.2µm sterile filtered)

Purification: Ammonium Sulfate Precipitation

Buffer System: PBS

Preservatives: 0.08% Sodium Azide

Applications: Western blotting: 25-100 μg/ml.

Immunohistochemistry: 25-100 μg/ml. Immunoprecipitation: 25-100 μg/ml.

The antibody has been tested using Immunoprecipitation against 5-methyl cytosine (5-MeC) and bromodeoxyuridine (BrdU) or a control (no antigen). At a concentration of $25 \mu g/ml$, this product demonstrates 8-fold higher reactivity with 5-MeC versus BrdU.

For best results, use product at 25-100 µg/ml.

Note: Denature DNA sample first so that bases are accessible to anti BrdU antibody. Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody recognizes BrdU (Bromodeoxyuridine).

Storage: Upon receipt, store undiluted (in aliquots) at -20°C.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

Product Citations: Originator or purchased from resellers:

1. Dempsey RJ, Sailor KA, Bowen KK, Türeyen K, Vemuganti R. Stroke-induced progenitor cell proliferation in adult spontaneously hypertensive rat brain: effect of exogenous IGF-1 and GDNF. J Neurochem. 2003 Nov;87(3):586-97. PubMed PMID:

14535942.

General Readings: 1. Nakamura S, Takeda Y, Kanno M, Yoshida T, Ohtake S, Kobayashi K, et al.

Application of bromodeoxyuridine (BrdU) and anti-BrdU monoclonal antibody for the in vivo analysis of proliferative characteristics of human leukemia cells in bone

marrows. Oncology. 1991;48(4):285-9. PubMed PMID: 1716352.



- 2. Wilson GD. Cell kinetic studies using a monoclonal antibody to bromodeoxyuridine. Methods Mol Biol. 1998;80:255-66. PubMed PMID: 9664383.
- 3. Gray, J. (Ed), Special Issue: Monoclonal antibodies against bromodeoxyuridine Cytometry 1985, Vol. 6(6)

Pictures:



