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Product Information

Monoclonal Anti-Pontin, Clone 5G3-11
produced in mouse, IgG fraction of culture supernatant

Catalog Number **SAB4200194**

Product Description

Monoclonal Anti-Pontin (mouse IgG1 isotype) is derived from the hybridoma 5G3-11 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a human Pontin (GeneID: 8607) fusion protein. The corresponding sequence differs by one amino acid in mouse. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is isolated by Protein A affinity chromatography from culture supernatant of hybridoma cells grown with horse serum in a bioreactor.

Monoclonal Anti-Pontin recognizes human, monkey and canine Pontin (not tested in other species). The antibody may be used is several immunochemical techniques including immunoblotting (~50 kDa), immunoprecipitation, ChIP, immunohistochemistry and immunofluorescence.[1-3]

Pontin and Reptin are two related members of the AAA+ (ATPases associated with diverse cellular activities) family of ATPases. Pontin and Reptin share some homology to the bacterial RuvB gene, a DNA helicase essential for homologous recombination and DNA double-strand break repair. Pontin and Reptin are associated with several chromatin-remodeling complexes and are involved in multiple biological processes including chromatin remodeling, DNA damage repair, telomerase activity, transcriptional regulation, apoptosis and cancer metastasis. Both proteins are also involved in cellular transformation by β-catenin and c-myc through their chromatin-remodeling function.[4-6]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze at –20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody dilution of 1:1,000-1:2000 is recommended using whole extracts of human HEK-293T or MCF-7 cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

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3. Lauscher, J.C., et al., *Hum. Pathol.*, **38**, 978-985 (2007).
4. Gallant, P., *Trends Cell Biol.*, **17**, 187-192 (2007).
5. Huber, O., et al., *Cancer Res.*, **68**, 6873-6876 (2008).
6. Jha, S., and Dutta, A., *Mol. Cell*, **34**, 521-533 (2009).

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