

Product Information

Anti-BRD7 antibody, Rat monoclonal
clone BRM 2D3, purified from hybridoma cell culture

Product Number **SAB4200047**

Product Description

Anti-BRD7 (rat IgG2a isotype) is derived from the hybridoma BRM 2D3 produced by the fusion of mouse myeloma cells (P3X63Ag8.653) and splenocytes from rat immunized with a fusion protein expressing a fragment of human BRD7 (GeneID: 29117). The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Anti-BRD7 recognizes human, monkey, bovine, dog, mouse, and rat BRD7. The product may be used in several immunochemical techniques including immunoblotting (~ 80 kDa), immunoprecipitation, and immunocytochemistry.

BRD7, a novel bromodomain gene, encodes a protein that inhibits cell growth and cell cycle progression by transcriptional regulation of some cell cycle-related genes as well as some important molecules involved in ras/MEK/ERK and Rb/E2F pathways.^{1,2} Its transcriptional down regulation has been shown to be critical to the pathogenesis of nasopharyngeal carcinoma (NPC). Specifically, DNA methylation suppressed BRD7 expression in NPC cells. Furthermore, methylation frequency of BRD7 promoter was much higher in the tumor and in matched blood samples from NPC patients than in blood samples from normal individuals. Therefore, it has been suggested that DNA methylation of BRD7 promoter may serve as a diagnostic marker in NPC.³

Reagent

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

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at -20 °C. For continuous use, the product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. 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 dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 0.5-1.0 µg/mL is recommended using HeLa cells extract.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Peng, C. et al., *J. Cell Biochem.*, **97**, 882-892 (2006).
2. Zhou, J. et al., *J. Cell Physiol.*, **200**, 89-92 (2004).
3. Liu, H. et al., *BMC Cancer*, **253**, 1-13 (2008).

RC,VS,GG,TD,KAA,PHC,MAM 04/21-1