

Mouse Anti-BRG1/SMARCA4/SNF2 [MD67]: MC0026

Intended Use: For Research Use Only

Description: Transcription activator BRG1 also known as ATP-dependent helicase SMARCA4 is a protein that in humans is encoded by the SMARCA4 gene. The protein encoded by this gene is a member of the SWI/SNF family of proteins and is similar to the brahma protein of Drosophila. Members of this family have helicase and ATPase activities and are thought to regulate transcription of certain genes by altering the chromatin structure around those genes. The encoded protein is part of the large ATP-dependent chromatin remodeling complex SNF/SWI, which is required for transcriptional activation of genes normally repressed by chromatin. In addition, this protein can bind BRCA1, as well as regulate the expression of the tumorigenic protein CD44. Mutations in this gene cause rhabdoid tumor predisposition syndrome type 2. Multiple transcript variants encoding different isoforms have been found for this gene.

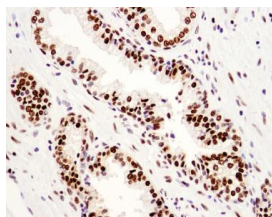
Specifications:

Clone: MD67
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human, mouse, rat, monkey
 Localization: Nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, WB
 Package:

Description	Catalog No.	Size
BRG1/SMARCA4/SNF2 [MD67] Concentrated	MC0026	1 ml

IHC Procedure*:

Positive Control Tissue: Colon cancer, prostate cancer
 Concentrated Dilution: 25-100
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human prostate cancer stained with anti-BRG1 using DAB

References:

1. Prospective immunohistochemical analysis of BRAF V600E mutation in melanoma human pathology. February Volume 46, Issue 2, Pages 169–175, 2015.
2. Myc Regulates Chromatin Decompaction and Nuclear Architecture during B Cell Activation. Kieffer-Kwon KR, et al. Mol Cell 67:566-578.e10, 2017.
3. The Short Isoform of BRD4 Promotes HIV-1 Latency by Engaging Repressive SWI/SNF Chromatin-Remodeling Complexes. Conrad RJ, et al. Mol Cell 67:1001-1012.e6, 2017.
4. Hormone-induced repression of genes requires BRG1-mediated H1.2 deposition at target promoters. Nacht AS, et al. EMBO J 35:1822-43, 2016.

Doc. 100-MC0026
Rev. A