Purified Mouse Anti-human BRG1 Antibody *BRG-01, monoclonal*

Catalog number: V103310
Unit size: 0.1 mg

Product Details

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	Lot specific (please consult certificate of analysis for given lot)
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 15 mM sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Immunogen	BRG1
Clone	BRG-01

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with under optimal conditions
Application	WB

Applications

Transcription activator BRG1 is a protein that can be found in the nucleolus, SWI/SNF complex and membrane of cells. It is alternatively called SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A member 4, SNF2-β and BRG1-associated factor 190A. In humans, BRG1 is an integral part of transcription by RNA polymerase II. Sequencing of BRG1 has shown it contains 5 types of conserved structural units: QLQ, bromo, helicase C-terminal, helicase ATP-binding and HSA domain. BRG1 binds with p53, transcription factor and RNA, and in addition, it is thought to be essential to organismal processes, for example, ATP-dependent chromatin remodeling, β-catenin-TCF complex assembly and positive regulation by host of viral transcription. It plays a role in the upregulation of pri-miRNA transcription by RNA polymerase II, transcription by RNA polymerase II and transcription, DNA-templated conversely. BRG1 also inhibits transcription, DNA-templated, transcription by RNA polymerase II and cell growth. BRG1 is the subject of extensive examination in part because of the fact that it is a member of the interleukin-7-mediated signaling pathway, positive regulation of Wnt signaling pathway and positive regulation of glucose mediated signaling pathway. BRG1 has been thought to be involved with essential functions like transcription corepressor, helicase and DNA-dependent ATPase activity. BRG1 is clinically significant because abnormalities in its function have been associated with diseases like rhabdoid tumor predisposition syndrome 2 (RTPS2) and coffin-siris syndrome 4 (CSS4). Coffin-Siris syndrome 4, an autosomal dominant inheritancedisorder characterized by microcephaly, hirsutism and short stature, has in specific been of interest to investigators.