Recombinant SMARCA2 / BRM protein

Catalog No: 82041, 82641
Expressed In: Baculovirus

Quantity: 20, 1000 µg
Source: Human

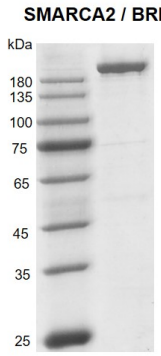
Buffer Contents: Recombinant SMARCA2 / BRM protein in 25 mM HEPES pH 7.5, 300 mM NaCl, 20% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

Background: SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2 (SMARCA2), also known as BRM, is a member of the SWI/SNF family of proteins and is like 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.SMARCA2 contains bromodomains for interaction with other proteins. The bromodomain functions as a 'reader' of epigenetic histone marks and regulates chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets. SMARCA2 is involved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin remodeling complex recruited by vitamin D receptor (VDR). SMARCA1 belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). SMARCA2 plays a pivotal role in the regulation of the switch in subunit composition of the npBAF and nBAF complexes as cells transition from proliferating neural stem/progenitor cells to post-mitotic neurons during neural development.

Protein Details: Recombinant SMARCA2 / BRM protein was expressed in a baculovirus expression system as the full length protein (accession number NP_003061.3) with an N-terminal FLAG tag. The molecular weight of the protein is 182.6 kDa.

Application Notes: This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for this product is shown.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

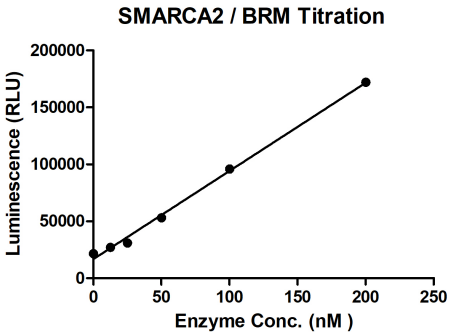


Recombinant SMARCA2 / BRM protein

10% SDS-PAGE Coomassie staining

MW: 182.6 kDa

Purity: ≥ 95%



ADP-Glo assay for SMARCA2 / BRM activity

100 μM ATP and 10 nM Salmon sperm DNA was incubated with different concentrations of SMARCA2/BRM protein in a 10 μl reaction system containing 20 mM HEPES (pH 7.5) ,10mM MgCl2, 50 mM NaCl, 0.1%Tween -20, 1 mM DTT for 1 hour, then add 10 μl ADP-Glo Reagent at 25℃ for 60min.Then 20 μl Kinase. Detection Reagent incubates at 25℃ for 60min.

All the operations and reactions were performed at RT. Finally, Luminescence measurement is collected by BMG.