

SREBP-1 (Sterol Regulatory Element Binding Protein-1) Ab-1 (Clone 2A4)

Mouse Monoclonal Antibody

Cat. #MS-1207-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)

Cat. #MS-1207-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Cat. #MS-1207-PCL (0.1ml) (Positive Control for Western Blot)

Description: SREBP-1 and -2 are transcription factors which participate in the control of cholesterol homeostasis. SREBPs proteins, which are attached to the endoplasmic reticulum and nuclear envelope, are proteolytically cleaved and thus activated in response to conditions of low cellular sterol. Upon activation of SREBP-1 or -2, an ~480-500 amino acid, N-terminal cleavage fragment of these proteins enters the nucleus and activates transcription of enzymes and other proteins required for cholesterol synthesis. SCA (SREBP-cleavage activity) and caspase-3 proteases cleave SREBPs. SREBP proteins containing point mutations at caspase-3 cleavage sites (Asp460 in SREBP-1 and Asp468 in SREBP-2) do not become cleaved following induction of apoptosis, suggesting that SREBPs may play some role in apoptotic processes.

Mol. Wt. of Antigen: 125kDa (precursor) and 60-70kDa (cleaved)

Epitope: aa 301-407

Species Reactivity: Human and Hamster. Others not-known.

Clone Designation: 2A4

Ig Isotype / Light Chain: IgG₁ / κ

Immunogen: Recombinant protein encoding N-terminal amino acids 301-407 (the bHLH/leucine zipper domain) of human SREBP-1.

Applications and Suggested Dilutions:

- Immunoprecipitation (Not verified)
 - Western Blotting (Ab 1-2µg/ml for 2hrs at RT)
- The optimal dilution for a specific application should be determined by the investigator.

Positive Control: HeLa and IMR5 cells

Cellular Localization: Cytoplasmic and nuclear

Supplied As:

200µg/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.

Storage and Stability: Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Key References:

1. Wang, X., et al. (1995) J. Biol. Chem. 270:18044-18050.
2. Wang, X., et al. (1996) EMBO J. 15:1012-1020.
3. Sato, R., et al. (1994) J. Biol. Chem. 269:17267-17273.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

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