

Mouse Sik2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17441c

Specification

Mouse Sik2 Antibody (Center) - Product Information

Application WB,E **Primary Accession** O8CFH6 Other Accession NP 848825.2 Reactivity Mouse Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 104198 Antigen Region 606-633

Mouse Sik2 Antibody (Center) - Additional Information

Gene ID 235344

Other Names

Serine/threonine-protein kinase SIK2, Salt-inducible kinase 2, SIK-2, Serine/threonine-protein kinase SNF1-like kinase 2, Sik2, Snf1lk2

Target/Specificity

This Mouse Sik2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 606-633 amino acids from the Central region of mouse Sik2.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Mouse Sik2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Sik2 Antibody (Center) - Protein Information

Name Sik2

Synonyms Snf1lk2



Function Serine/threonine-protein kinase that plays a role in many biological processes such as fatty acid oxidation, autophagy, immune response or glucose metabolism (PubMed:12624099, PubMed:16817901, PubMed:29211348). Phosphorylates 'Ser-794' of IRS1 in insulin- stimulated adipocytes, potentially modulating the efficiency of insulin signal transduction (PubMed:12624099). Inhibits CREB activity by phosphorylating and repressing TORCs, the CREB-specific coactivators (PubMed:16817901). Phosphorylates EP300 and thus inhibits its histone acetyltransferase activity. In turn, regulates the DNA-binding ability of several transcription factors such as PPARA or MLXIPL (By similarity). Also plays a role in thymic T-cell development (PubMed:34732767).

Cellular Location Cytoplasm.

Tissue Location

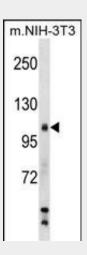
Present in both white and brown adipose tissues with levels increasing during adipocyte differentiation. Lower levels observed in the testis.

Mouse Sik2 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

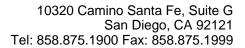
Mouse Sik2 Antibody (Center) - Images



Mouse Sik2 Antibody (Center) (Cat. #AP17441c) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the Sik2 antibody detected the Sik2 protein (arrow).

Mouse Sik2 Antibody (Center) - Background

Phosphorylates 'Ser-789' of IRS1 in insulin-stimulated adipocytes, potentially modulating the efficiency of insulin signal transduction. Inhibits CREB activity by phosphorylating and repressing TORCs, the CREB-specific coactivators.





Mouse Sik2 Antibody (Center) - References

Trivedi, C.M., et al. Dev. Cell 19(3):450-459(2010)

Muraoka, M., et al. Am. J. Physiol. Endocrinol. Metab. 296 (6), E1430-E1439 (2009): Du, J., et al. Obesity (Silver Spring) 16(3):531-538(2008)

Katoh, Y., et al. FEBS J. 273(12):2730-2748(2006)

Horike, N., et al. J. Biol. Chem. 278(20):18440-18447(2003)