

### Mouse Sik2 Antibody (Center) Blocking Peptide Synthetic peptide Catalog # BP17441c

### Specification

# Mouse Sik2 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

### <u>Q8CFH6</u>

# Mouse Sik2 Antibody (Center) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# Mouse Sik2 Antibody (Center) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/12624099" target="\_blank">12624099</a>, PubMed:<a href="http://www.uniprot.org/citations/16817901" target="\_blank">16817901</a>, PubMed:<a href="http://www.uniprot.org/citations/29211348" target="\_blank">29211348</a>). Phosphorylates 'Ser-794' of IRS1 in insulin- stimulated adipocytes, potentially modulating the efficiency of insulin signal transduction (PubMed:<a href="http://www.uniprot.org/citations/12624099" target="\_blank">12624099</a>). Inhibits CREB activity by phosphorylating and repressing TORCs, the CREB-specific coactivators (PubMed:<a href="http://www.uniprot.org/citations/16817901" target="\_blank">16817901</a>). 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:<a href="http://www.uniprot.org/citations/34732767" target="\_blank">34732767</a>).



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) Blocking Peptide - Protocols

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

Blocking Peptides

# Mouse Sik2 Antibody (Center) Blocking Peptide - Images

# Mouse Sik2 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)