

DESCRIPTION

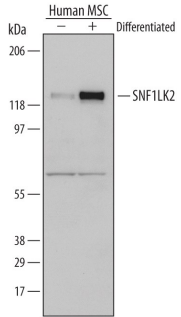
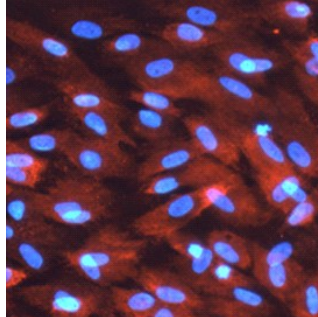
Species Reactivity	Human
Specificity	Detects human SNF1LK2 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human SNF1LK2 Ala663-Leu818 Accession # Q9H0K1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human SNF1LK2 by Western Blot. Western blot shows lysates of human mesenchymal stem cells (MSC) grown in the absence (-) or presence (+) of StemXVivo™ Adipogenic Supplement (Catalog # CCM001). PVDF membrane was probed with 1 µg/mL of Goat Anti-Human SNF1LK2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5737), followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for SNF1LK2 at approximately 125 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>SNF1LK2 in Human Adipocytes. SNF1LK2 was detected in immersion fixed human adipocytes using 10 µg/mL Goat Anti-Human SNF1LK2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5737) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for <i>Fluorescent ICC Staining of Cells on Coverslips</i>.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

SNF1LK2 (Sucrose non-fermenting 1 like kinase 2) also known as SIK2 (Salt-inducible kinase 2) is a cytoplasmic 125 kDa member of the CAMK Ser/Thr protein kinase family, AMPK subfamily of enzymes. It is expressed in preadipocytes/adipocytes, with levels strongly induced during early differentiation. SNF1LK2 regulates the early phase of insulin signaling by phosphorylating IRS-1 on Ser794. Human SNF1LK2 is 926 amino acids (aa) in length and contains a protein kinase domain (aa 20-271) with an ATP binding site (Lys49) and a catalytic loop (aa 140-149), followed by a phosphorylation activation site at Thr175, a UBA (ubiquitin-associated) domain (aa 295-335) and another PKA-dependent phosphorylation site at Ser587.