SANTA CRUZ BIOTECHNOLOGY, INC.

BLAME siRNA (m): sc-60274

BACKGROUND

CD2 family proteins are encoded by genes near the centromere of the long and short arms of chromosome 1. The growing CD2 family consists of Ig domain-containing cell surface proteins involved in lymphocyte activation and/or adhesion via extracellular and cytoplasmic domains. B lymphocyte activator macrophage expressed (BLAME), also designated SLAM family member 8 (SLAMF8), is a 285 amino acid CD2 family protein that contains a leader sequence, a 31 residue cytoplasmic tail and a 212 amino acid extracellular domain that has an N-terminal IgV-like fold without disulfide bonds and a membrane proximal C2-like fold. BLAME may be involved in B lineage commitment and/or regulation of signaling through the B cell receptor. It localizes to the membrane and is expressed in lymph node, thymus, bone marrow and spleen. The human BLAME protein is 75% identical to the mouse BLAME protein.

REFERENCES

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4. Kumaresan, P.R., Lai, W.C., Chuang, S.S., Bennett, M. and Mathew, P.A. 2002. CS1, a novel member of the CD2 family, is homophilic and regulates NK cell function. Mol. Immunol. 39: 1-8.
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CHROMOSOMAL LOCATION

Genetic locus: Slamf8 (mouse) mapping to 1 H3.

PRODUCT

BLAME siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see BLAME shRNA Plasmid (m): sc-60274-SH and BLAME shRNA (m) Lentiviral Particles: sc-60274-V as alternate gene silencing products.

For independent verification of BLAME (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-60274A, sc-60274B and sc-60274C.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

BLAME siRNA (m) is recommended for the inhibition of BLAME expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor BLAME gene expression knockdown using RT-PCR Primer: BLAME (m)-PR: sc-60274-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.