

LAIR-2 siRNA (h): sc-62538

BACKGROUND

Leukocyte-associated immunoglobulin-like receptor 2 (LAIR-2), also called CD306 antigen, is a secreted 152 amino acid member of the immunoglobulin superfamily. LAIR-2 was identified by its similarity to LAIR-1. It may help modulate mucosal tolerance established by the interaction of LAIR-1 with Ep-CAM. Two isoforms have been characterized for this protein. Isoform 1, also called LAIR-2a, is the full length protein. Isoform 2, also called LAIR-2b, is missing the amino acid sequence from 122 and 138.

REFERENCES

1. Meyaard, L., van der Vuurst de Vries, A.R., de Ruiter, T., Lanier, L.L., Phillips, J.H. and Clevers, H. 2001. The epithelial cellular adhesion molecule (Ep-CAM) is a ligand for the leukocyte-associated immunoglobulin-like receptor (LAIR). *J. Exp. Med.* 194: 107-112.
2. Xie, X., Ouyang, W.M., Xue, J.N., Zhang, X.H., Liu, F., Zhuang, R. and Jin, B.Q. 2004. Cloning, prokaryotic expression of LAIR and identification of their immunological reactivities. *Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi* 19: 118-120.
3. Xu, X.G., Wang, C.Y., Xie, X., Xue, J.N., Ouyang, W.M., Jian, J.L. and Jin, B.Q. 2005. Identification of cell lines expressing the putative ligand(s) for LAIR-1(CD305) and LAIR-2(CD306). *Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi* 21: 553-556, 560.

CHROMOSOMAL LOCATION

Genetic locus: LAIR2 (human) mapping to 19q13.42.

PRODUCT

LAIR-2 siRNA (h) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see LAIR-2 shRNA Plasmid (h): sc-62538-SH and LAIR-2 shRNA (h) Lentiviral Particles: sc-62538-V as alternate gene silencing products.

For independent verification of LAIR-2 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-62538A, sc-62538B and sc-62538C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

PROTOCOLS

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

APPLICATIONS

LAIR-2 siRNA (h) is recommended for the inhibition of LAIR-2 expression in human 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 μ M in 66 μ l. 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 LAIR-2 gene expression knockdown using RT-PCR Primer: LAIR-2 (h)-PR: sc-62538-PR (20 μ l). 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.