



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

I κ B- ζ siRNA (m): sc-44897

BACKGROUND

I κ B- ζ (also called MAIL-S or INAP) is a member of the I κ B family. It shares a 30% identity with other family members and consists of six ankyrin repeats at its C-terminal. I κ B- ζ accumulates in the nucleus and, in humans, associates with the p50 and p65 subunits of nuclear NF κ B via its ankyrin repeats. The mouse homologue of I κ B- ζ has only been shown to associate with the p50 subunit. I κ B- ζ inhibits DNA binding and activity of the transcription factor NF κ B. Distinct from other I κ B family members, I κ B- ζ is not degraded upon cell stimulation and activation of NF κ B, rather evidence shows that it is up-regulated under these circumstances. This suggests that I κ B- ζ plays a significant role in regulation of NF κ B and that NF κ B may regulate I κ B- ζ in a negative feedback loop. Regulation of NF κ B by I κ B- ζ may differ depending on the species.

REFERENCES

1. Yamazaki, S., et al. 2001. A novel I κ B protein, I κ B- ζ , induced by proinflammatory stimuli, negatively regulates NF κ B in the nuclei. *J. Biol. Chem.* 276: 27657-27662.
2. Muta, T., et al. 2003. I κ B- ζ , a new anti-inflammatory nuclear protein induced by lipopolysaccharide, is a negative regulator for NF κ B. *J. Endotoxin Res.* 9: 187-191.
3. Shiina, T. et al. 2004. Targeted disruption of MAIL, a nuclear I κ B protein, leads to severe atopic dermatitis-like disease. *J. Biol. Chem.* 279: 55493-55498.
4. Kusaka, M. et al. 2005. Gene expression profile in rat renal isografts from brain dead donors. *Transplant. Proc.* 37: 364-366.
5. Yamazaki, S., et al. 2005. Stimulus-specific induction of a novel NF κ B regulator, I κ B- ζ , via Toll/Interleukin-1 receptor is mediated by mRNA stabilization. *J. Biol. Chem.* 280: 1678-1687.
6. Motoyama, M., et al. 2005. Positive and negative regulation of NF κ B-mediated transcription by I κ B- ζ , an inducible nuclear protein. *J. Biol. Chem.* 280: 7444-7451.

CHROMOSOMAL LOCATION

Genetic locus: Nfkbiz (mouse) mapping to 16 C1.1.

PRODUCT

I κ B- ζ 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see I κ B- ζ shRNA Plasmid (m): sc-44897-SH and I κ B- ζ shRNA (m) Lentiviral Particles: sc-44897-V as alternate gene silencing products.

For independent verification of I κ B- ζ (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-44897A, sc-44897B and sc-44897C.

RESEARCH USE

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

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.

APPLICATIONS

I κ B- ζ siRNA (m) is recommended for the inhibition of I κ B- ζ 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 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 I κ B- ζ gene expression knockdown using RT-PCR Primer: I κ B- ζ (m)-PR: sc-44897-PR (20 μ l, 502 bp). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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