

# Aminopeptidase B siRNA (m): sc-141044

## BACKGROUND

Aminopeptidase B (arginyl aminopeptidase (aminopeptidase B)), also known as RNPEP or arginine aminopeptidase, is a 650 amino acid protein belonging to the peptidase M1 family. Encoded by a gene that maps to human chromosome 1q32.1, Aminopeptidase B exhibits ubiquitous tissue expression, including both endocrine and nonendocrine cell types, and is associated with the external face of plasma membrane. Aminopeptidase B participates in aminopeptidase, epoxide hydrolase and metalloexopeptidase activities, as well as zinc ion binding, whereby binding one zinc ion per subunit. Functioning as an exopeptidase, Aminopeptidase B selectively removes arginine and lysine residues from the N-terminus of several peptides. Structurally similar to Leukotriene A4 hydrolase (LTA4H), Aminopeptidase B also functions to hydrolyze Leukotriene A4 (LTA4) into Leukotriene B4 (LTB4).

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Rnpep (mouse) mapping to 1 E4.

## PRODUCT

Aminopeptidase B 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Aminopeptidase B shRNA Plasmid (m): sc-141044-SH and Aminopeptidase B shRNA (m) Lentiviral Particles: sc-141044-V as alternate gene silencing products.

For independent verification of Aminopeptidase B (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-141044A, sc-141044B and sc-141044C.

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

## APPLICATIONS

Aminopeptidase B siRNA (m) is recommended for the inhibition of Aminopeptidase B 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  $\mu$ M in 66  $\mu$ 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 Aminopeptidase B gene expression knockdown using RT-PCR Primer: Aminopeptidase B (m)-PR: sc-141044-PR (20  $\mu$ l, 588 bp). 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.