

Product datasheet for **SR410661**

Atoh8 Mouse siRNA Oligo Duplex (Locus ID 71093)

Product data:

Product Type:	siRNA Oligo Duplexes
Purity:	HPLC purified
Quality Control:	Tested by ESI-MS
Sequences:	Available with shipment
Stability:	One year from date of shipment when stored at -20°C.
# of transfections:	Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final conc. 10 nM).
Note:	Single siRNA duplex (10nmol) can be ordered.
RefSeq:	NM_153778
UniProt ID:	Q99NA2
Synonyms:	4933425C05Rik; bHLHa21; Hath6; Math6; okadin
Components:	Atoh8 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 71093) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml



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Summary:

Transcription factor that binds a palindromic (canonical) core consensus DNA sequence 5'-CANNTG- 3' known as an E-box element, possibly as a heterodimer with other bHLH proteins (By similarity). Regulates endothelial cell proliferation, migration and tube-like structures formation (By similarity). Modulates endothelial cell differentiation through NOS3 (By similarity). May be implicated in specification and differentiation of neuronal cell lineages in the brain (PubMed:11733035). May participate in kidney development and may be involved in podocyte differentiation (PubMed:16937370). During early embryonic development is involved in tissue-specific differentiation processes that are dependent on class II bHLH factors and namely modulates the differentiation program initiated by the pro-endocrine factor NEUROG3 (PubMed:18560595). During myogenesis, may play a role during the transition of myoblasts from the proliferative phase to the differentiation phase (PubMed:24186058). Positively regulates HAMP transcription in two ways, firstly by acting directly on the HAMP promoter via E-boxes binding and indirectly through increased phosphorylation of SMAD protein complex (By similarity). Repress NEUROG3-dependent gene activation in a gene-specific manner through at least two mechanisms; requires only either the sequestering of a general partner such as TCF3 through heterodimerization, either also requires binding of the bHLH domain to DNA via a basic motif (PubMed:23938248). [UniProtKB/Swiss-Prot Function]

Performance Guaranteed:

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data required).