

Datasheet for ABIN7547709
FOXC1 Protein (AA 1-553) (His tag)



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Overview

Quantity:	1 mg
Target:	FOXC1
Protein Characteristics:	AA 1-553
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FOXC1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat FOXC1 Protein expressed in mammalian cells.
Sequence:	<p>MQARYSVSSP NSLGVVPYLG GEQSYRAAA AAAGGGYTAM PAPMSVYSHP AHAEQYPGGM ARAYGPYTPQ PPKDMVKPP YSYIALITMA IQNAPDKKIT LNGIYQFIMD RFPFYRDNKQ GWQNSIRHNL SLNECFVKVP RDDKKPGKGS YWTLDPDSYN MFENGSLRR RRRFKKKDAV KDKEEKDRHL LKEPPPPGRQ PPPAPPEQAD GNAPGPQPPP VRIQDIKTEN GTCPSPPQPL SPAAALGSGS AAVPKIESP DSSSSSLSSG SSPPGSLPSA RPLSLDGADS APPPPAPSAP PPHHSQGFVS DNIMTSLRGS PQSAAELSS GLLASAAASS RAGIAPPLAL GAYSPGQSSL YSSPCSQTSS AGSSGGGGGG AGAAGGAGGA GTYHCNLQAM SLYAAGERGG HLQGAPGGAG GSAVDDPLPD YSLPPVTSSS SSSLSHGGGG GGGGGGQEAG HHPAAHQGRL TSWYLNQAGG DLGHLASAAA AAAAAGYPGQ QNFHHSVREM FESQRIGLNN SPVNGNSSCQ MAFPSSQSLY RTSGAFVYDC SKF Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make</p>

Product Details

another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

FOXC1

Alternative Name:

FOXC1 ([FOXC1 Products](#))

Background:

Forkhead box protein C1 (Forkhead-related protein FKHL7) (Forkhead-related transcription factor 3) (FREAC-3),FUNCTION: DNA-binding transcriptional factor that plays a role in a broad range of cellular and developmental processes such as eye, bones, cardiovascular, kidney and skin development (PubMed:11782474, PubMed:15299087, PubMed:15684392, PubMed:16492674, PubMed:27907090, PubMed:14506133, PubMed:14578375, PubMed:15277473, PubMed:16449236, PubMed:17210863, PubMed:19793056, PubMed:19279310, PubMed:25786029, PubMed:27804176). Acts either as a transcriptional activator or repressor (PubMed:11782474). Binds to the consensus binding site 5'-[G/C][A/T]AAA[T/C]AA[A/C]-3' in promoter of target genes (PubMed:7957066, PubMed:11782474, PubMed:12533514, PubMed:14506133, PubMed:19793056, PubMed:27804176). Upon DNA-binding, promotes DNA bending (PubMed:7957066, PubMed:14506133). Acts as a transcriptional coactivator (PubMed:26565916). Stimulates

Target Details

Indian hedgehog (Ihh)-induced target gene expression mediated by the transcription factor GLI2, and hence regulates endochondral ossification (By similarity). Acts also as a transcriptional coregulator by increasing DNA-binding capacity of GLI2 in breast cancer cells (PubMed:26565916). Regulates FOXO1 through binding to a conserved element, 5'-GTAAACAAA-3' in its promoter region, implicating FOXC1 as an important regulator of cell viability and resistance to oxidative stress in the eye (PubMed:17993506). Cooperates with transcription factor FOXC2 in regulating expression of genes that maintain podocyte integrity (By similarity). Promotes cell growth inhibition by stopping the cell cycle in the G1 phase through TGF β 1-mediated signals (PubMed:12408963). Involved in epithelial-mesenchymal transition (EMT) induction by increasing cell proliferation, migration and invasion (PubMed:20406990, PubMed:22991501). Involved in chemokine CXCL12-induced endothelial cell migration through the control of CXCR4 expression (By similarity). Plays a role in the gene regulatory network essential for epidermal keratinocyte terminal differentiation (PubMed:27907090). Essential developmental transcriptional factor required for mesoderm-derived tissues, such as the somites, skin, bone and cartilage. Positively regulates CXCL12 and stem cell factor expression in bone marrow mesenchymal progenitor cells, and hence plays a role in the development and maintenance of mesenchymal niches for haematopoietic stem and progenitor cells (HSPC). Plays a role in corneal transparency by preventing both blood vessel and lymphatic vessel growth during embryonic development in a VEGF-dependent manner. Involved in chemokine CXCL12-induced endothelial cell migration through the control of CXCR4 expression (By similarity). May function as a tumor suppressor (PubMed:12408963).

{ECO:0000250|UniProtKB:Q61572, ECO:0000269|PubMed:11782474, ECO:0000269|PubMed:12408963, ECO:0000269|PubMed:12533514, ECO:0000269|PubMed:14506133, ECO:0000269|PubMed:14578375, ECO:0000269|PubMed:15277473, ECO:0000269|PubMed:15299087, ECO:0000269|PubMed:15684392, ECO:0000269|PubMed:16449236, ECO:0000269|PubMed:16492674, ECO:0000269|PubMed:17210863, ECO:0000269|PubMed:17993506, ECO:0000269|PubMed:19279310, ECO:0000269|PubMed:19793056, ECO:0000269|PubMed:20406990, ECO:0000269|PubMed:22991501, ECO:0000269|PubMed:25786029, ECO:0000269|PubMed:26565916, ECO:0000269|PubMed:27804176, ECO:0000269|PubMed:27907090, ECO:0000269|PubMed:7957066}.

Molecular Weight: 56.8 kDa

UniProt: [Q12948](#)

Pathways: [Chromatin Binding](#), [Glycosaminoglycan Metabolic Process](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months
