Datasheet for ABIN7555932

YY1 Protein (AA 1-414) (His tag)

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Overview

Quantity:	1 mg
Target:	YY1
Protein Characteristics:	AA 1-414
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This YY1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat YY1 Protein expressed in mammalien cells.
Sequence:	MASGDTLYIA TDGSEMPAEI VELHEIEVET IPVETIETTV VGEEEEEDDD DEDGGGGDHG GGGGHGHAGH HHHHHHHHHH PPMIALQPLV TDDPTQVHHH QEVILVQTRE EVVGGDDSDG LRAEDGFEDQ ILIPVPAPAG GDDDYIEQTL VTVAAAGKSG GGGSSSSGGG RVKKGGGKKS GKKSYLSGGA GAAGGGGADP GNKKWEQKQV QIKTLEGEFS VTMWSSDEKK DIDHETVVEE QIIGENSPPD YSEYMTGKKL PPGGIPGIDL SDPKQLAEFA RMKPRKIKED DAPRTIACPH KGCTKMFRDN SAMRKHLHTH GPRVHVCAEC GKAFVESSKL KRHQLVHTGE KPFQCTFEGC GKRFSLDFNL RTHVRIHTGD RPYVCPFDGC NKKFAQSTNL KSHILTHAKA KNNQ **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits:

Product Details

	• Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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:	YY1
Alternative Name:	YY1 (YY1 Products)
Background:	Transcriptional repressor protein YY1 (Delta transcription factor) (INO80 complex subunit S) (NF-E1) (Yin and yang 1) (YY-1),FUNCTION: Multifunctional transcription factor that exhibits positive and negative control on a large number of cellular and viral genes by binding to sites overlapping the transcription start site (PubMed:15329343, PubMed:17721549, PubMed:24326773, PubMed:25787250). Binds to the consensus sequence 5'-CCGCCATNTT-3', some genes have been shown to contain a longer binding motif allowing enhanced binding, the initial CG dinucleotide can be methylated greatly reducing the binding affinity (PubMed:15329343, PubMed:17721549, PubMed:24326773, PubMed:25787250). The effect on transcription regulation is depending upon the context in which it binds and diverse mechanisms of action include direct activation or repression, indirect activation or repression via cofactor recruitment, or activation or repression by disruption of binding sites or conformational DNA changes (PubMed:15329343, PubMed:17721549, PubMed:24326773, PubMed:25787250). Its activity is regulated by transcription factors and cytoplasmic proteins that have been shown to abrogate or completely inhibit YY1-mediated activation or repression

Target Details

	(PubMed:15329343, PubMed:17721549, PubMed:24326773, PubMed:25787250). For example, it acts as a repressor in absence of adenovirus E1A protein but as an activator in its presence (PubMed:1655281). Acts synergistically with the SMAD1 and SMAD4 in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression (PubMed:15329343). Binds to SMAD binding elements (SBEs) (5'-GTCT/AGAC-3') within BMP response element (BMPRE) of cardiac activating regions (PubMed:15329343). May play an important role in development and differentiation. Proposed to recruit the PRC2/EED-EZH2 complex to target genes that are transcriptional repressed (PubMed:11158321). Involved in DNA repair (PubMed:18026119, PubMed:28575647). In vitro, binds to DNA recombination intermediate structures (Holliday junctions). Plays a role in regulating enhancer activation (PubMed:28575647). {ECO:0000269|PubMed:11158321, ECO:0000269|PubMed:15329343, ECO:0000269|PubMed:1655281, ECO:0000269|PubMed:17721549, ECO:0000269|PubMed:18026119, ECO:0000269|PubMed:24326773, ECO:0000269|PubMed:25787250, ECO:0000269|PubMed:28575647}., FUNCTION: Proposed core component of the chromatin remodeling INO80 complex which is involved in transcriptional regulation, DNA replication and probably DNA repair, proposed to target the INO80 complex to YY1-responsive elements. {ECO:0000269|PubMed:17721549, ECO:0000269|PubMed:18026119}.
Molecular Weight:	44.7 kDa
UniProt:	P25490

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

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months