

ZBED1 Antibody
Catalog # ASC10879**Specification****ZBED1 Antibody - Product Information**

Application	WB
Primary Accession	O96006
Other Accession	AAH15030 , 15929151
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	ZBED1 antibody can be used for detection of ZBED1 by Western blot at 1 µg/mL.

ZBED1 Antibody - Additional InformationGene ID **9189****Target/Specificity**

ZBED1; This antibody is predicted to have no cross-reactivity to ZBED2 or ZBED3.

Reconstitution & Storage

ZBED1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

ZBED1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ZBED1 Antibody - Protein Information**Name** ZBED1**Function**

Functions as an E3-type small ubiquitin-like modifier (SUMO) ligase which sumoylates CHD3/Mi2- α , causing its release from DNA (PubMed:27068747). This results in suppression of CHD3/Mi2- α transcription repression, increased recruitment of RNA polymerase II to gene promoters and positive regulation of transcription including H1-5 and ribosomal proteins such as: RPS6, RPL10A, and RPL12 (PubMed:12663651, PubMed:17209048, PubMed:17220279, PubMed:27068747). The resulting increased transcriptional activity drives cell proliferation (PubMed:12663651, PubMed:17220279). Binds to 5'-TGTCG[CT]GA[CT]A-3' consensus sequences in gene promoters of ribosomal proteins (PubMed:12663651, PubMed:17209048, PubMed:17220279, PubMed:27068747).

Cellular Location

Nucleus, PML body. Nucleus. Note=In granular structures

Tissue Location

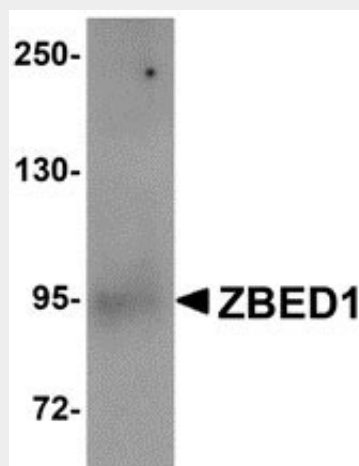
Ubiquitously expressed at low levels (PubMed:9887332). Expression is highest in skeletal muscle, heart, spleen and placenta (PubMed:9887332).

ZBED1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ZBED1 Antibody - Images



Western blot analysis of ZBED1 in A549 cell lysate with ZBED1 antibody at 1 µg/mL.

ZBED1 Antibody - Background

ZBED1 Antibody: ZBED1, also known as DREF, is the human homolog of the Drosophila protein DREF, a transcriptional regulatory factor required for expression of genes involved in DNA replication and cell proliferation. RNA interference (RNAi) experiments targeting ZBED1 RNA resulted in the inhibition of S phase entry and reduction of histone H1 mRNA in HeLa cells, suggesting that ZBED1 also plays a role in cell proliferation in human cells. At least 22 ribosomal proteins (RPs) possess ZBED1 binding sites in their promoters; anti-ZBED1 RNAi also resulted in decreased RP gene expression. Immunoprecipitation analyses have shown that ZBED1 self-associates in vivo via a carboxyl-terminal hATC domain, and this self-association is required for

nuclear localization and DNA binding.

ZBED1 Antibody - References

Ohshima N, Takahashi M, and Hirose F. Identification of a human homolog of the DREF transcription factor with a potential role in regulation of the histone H1 gene. J. Biol. Chem.2003; 278:22928-38.
Yamashita D, Sano Y, Adachi Y, et al. hDREF regulates cell proliferation and expression of ribosomal protein genes. Mol. Cell. Biol.2007; 27:2003-13.
Yamashita D, Komori H, Higuchi Y, et al. Human DNA replication-related element binding factor (hDREF) self-association via hATC domain is necessary for its nuclear accumulation and DNA binding. J. Biol. Chem.2007; 282:7563-75.