abcam

Product datasheet

Recombinant Human SATB2 protein ab132405

1 Image

Description

Product name Recombinant Human SATB2 protein

Expression system Wheat germ
Accession Q9UPW6

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MERRSESPCLRDSPDRRSGSPDVKGPPPVKVARLEQNG

WILKINGLOF CLINDOF DIKINGGOF DVINGF FFVRVANLLQING

SPMGARGRPNGA

VAKAVGGLMIPVFCVVEQLDGSLEYDNREEHAEFVLVRK

DVLFSQLVETA

LLALGYSHSSAAQAQGIIKLGRWNPLPLSYVTDAPDATVA

DMLQDVYHVV

TLKIQLQSCSKLEDLPAEQWNHATVRNALKELLKEMNQST

LAKECPLSQS

MISSIVNSTYYANVSATKCQEFGRWYKKYKKIKVERVEREN

LSDYCVLGQ

RPMHLPNMNQLASLGKTNEQSPHSQIHHSTPIRNQVPALQ

PIMSPGLLSP

QLSPQLVRQQIAMAHLINQQIAVSRLLAHQHPQAINQQFLN

HPPIPRAVK

PEPTNSSVEVSPDIYQQVRDELKRASVSQAVFARVAFNR

TQGLLSEILRK

EEDPRTASQSLLVNLRAMQNFLNLPEVERDRIYQDERERS

MNPNVSMVSS

ASSSPSSSRTPQAKTSTPTTDLPIKVDGANINITAAIYDEIQQ

EMKRAKV

SQALFAKVAANKSQGWLCELLRWKENPSPENRTLWENL

CTIRRFLNLPQH

ERDVIYEEESRHHHSERMQHVVQLPPEPVQVLHRQQSQP

AKESSPPREEA

PPPPPTEDSCAKKPRSRTKISLEALGILQSFIHDVGLYPD

QEAIHTLSA

QLDLPKHTIIKFFQNQRYHVKHHGKLKEHLGSAVDVAEYK

DEELLTESEE

1

NDSEEGSEEMYKVEAEEENADKSKAAPAEIDQR

Predicted molecular weight

109 kDa including tags

Amino acids

1 to 733

Specifications

Our **Abpromise guarantee** covers the use of **ab132405** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Western blot

ELISA

Form Liquid

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

00.8:Ha

Constituents: 0.31% Glutathione, 0.79% Tris HCI

General Info

Function Binds to DNA, at nuclear matrix- or scaffold-associated regions. Thought to recognize the sugar-

phosphate structure of double-stranded DNA. Transcription factor controlling nuclear gene expression, by binding to matrix attachment regions (MARs) of DNA and inducing a local

chromatin-loop remodeling. Acts as a docking site for several chromatin remodeling enzymes and also by recruiting corepressors (HDACs) or coactivators (HATs) directly to promoters and enhancers. Required for the initiation of the upper-layer neurons (UL1) specific genetic program

and for the inactivation of deep-layer neurons (DL) and UL2 specific genes, probably by

modulating BCL11B expression. Repressor of Ctip2 and regulatory determinant of corticocortical connections in the developing cerebral cortex. May play an important role in palate formation. Acts as a molecular node in a transcriptional network regulating skeletal development and osteoblast

differentiation.

Tissue specificity High expression in adult brain, moderate expression in fetal brain, and weak expression in adult

liver, kidney, and spinal cord and in select brain regions, including amygdala, corpus callosum,

caudate nucleus, and hippocampus.

Involvement in diseaseNote=Chromosomal aberrations involving SATB2 are found in isolated cleft palate. Translocation

t(2;7); translocation t(2;11).

Defects in SATB2 are a cause of cleft palate isolated (CPI) [MIM:119540]. A congenital fissure of the soft and/or hard palate, due to faulty fusion. Isolated cleft palate is not associated with cleft lips. Some patients may manifest other craniofacial dysmorphic features, mental retardation, and

osteoporosis.

Note=A chromosomal aberration involving SATB2 is found in a patient with classical features of

Toriello-Carey syndrome. Translocation t(2;14)(q33;q22).

Sequence similaritiesBelongs to the CUT homeobox family.

Contains 2 CUT DNA-binding domains.

Contains 1 homeobox DNA-binding domain.

Post-translational modifications

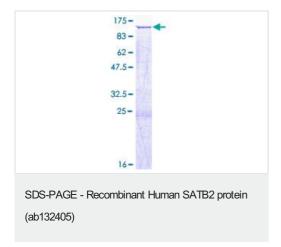
Sumoylated by PIAS1. Sumoylation promotes nuclear localization, but represses transcription

factor activity.

Cellular localization

Nucleus matrix.

Images



12.5% SDS-PAGE analysis of ab132405 stained with Coomassie Blue.

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