abcam

Product datasheet

Recombinant Human RUNX2 protein ab112259

1 Image

Description

Product name	Recombinant Human RUNX2 protein
Expression system	Wheat germ
Accession	Q13950
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	TSPSIHSTTPLSSTRGTGLPAITDVPRRISDDDTATSDFCL WPSTLSKKS QAGASELGPFSDPRQFPSISSLTESRFSNPRMHYPATFTY TPPVTSGMSL GMSATTHYHTYLPPPYPGSSQSQSGPFQTSSTPYLYYGTS
Predicted molecular weight	41 kDa
Amino acids	311 to 450
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab112259** in the following tested applications.

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

Applications	ELISA Western blot SDS-PAGE
Form	Liquid

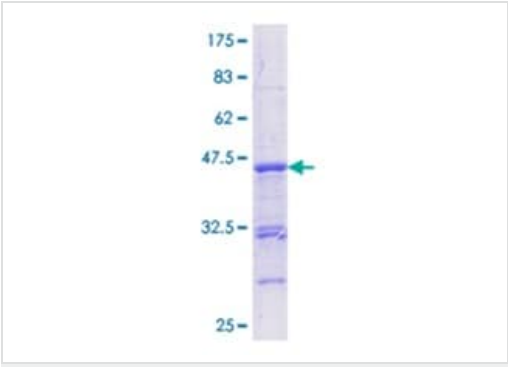
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

Function	Transcription factor involved in osteoblastic differentiation and skeletal morphogenesis. Essential for the maturation of osteoblasts and both intramembranous and endochondral ossification. CBF binds to the core site, 5'-PYGPYGGT-3', of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, osteocalcin, osteopontin, bone sialoprotein, alpha 1(I) collagen, LCK, IL-3 and GM-CSF promoters (By similarity). Inhibits MYST4-dependent transcriptional activation.
Tissue specificity	Specifically expressed in osteoblasts.
Involvement in disease	Defects in RUNX2 are the cause of cleidocranial dysplasia (CLCD) [MIM:119600]; also known as cleidocranial dysostosis (CCD). CLCD is an autosomal dominant skeletal disorder with high penetrance and variable expressivity. It is due to defective endochondral and intramembranous bone formation. Typical features include hypoplasia/aplasia of clavicles, patent fontanelles, wormian bones (additional cranial plates caused by abnormal ossification of the calvaria), supernumerary teeth, short stature, and other skeletal changes. In some cases defects in RUNX2 are exclusively associated with dental anomalies.
Sequence similarities	Contains 1 Runt domain.
Domain	A proline/serine/threonine rich region at the C-terminus is necessary for transcriptional activation of target genes and contains the phosphorylation sites.
Post-translational modifications	Phosphorylated; probably by MAP kinases (MAPK) (By similarity). Isoform 3 is phosphorylated on Ser-340.
Cellular localization	Nucleus.

Images



SDS-PAGE - Recombinant Human RUNX2 protein (ab112259)

Coomassie blue stained 12.5% SDS page analysis of ab112259

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet

- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors