abcam

Product datasheet

Recombinant mouse Wnt3a protein ab81484

★★★★★ 2 Abreviews 15 References 1 Image

Description

Product name Recombinant mouse Wnt3a protein

Biological activity The ED₅₀ was determined by its ability to induced alkaline phosphatase production by CCL-226

cells.

The expected ED_{50} for this effect is 0.4-0.6 ng/ml.

Purity > 75 % SDS-PAGE.

Greater than 75% by HPLC analyses.

Endotoxin level < 1.000 Eu/µg

Expression system Cell Culture

Accession P27467

Protein length Full length protein

Animal free No

Nature Recombinant

Species Mouse

Sequence SY PIWWSLAVGP QYSSLSTQPI LCASIPGLVP

KQLRFCRNYV EIMPSVAEGV KAGIQECQHQ
FRGRRWNCTT VSNSLAIFGP VLDKATRESA
FVHAIASAGV AFAVTRSCAE GSAAICGCSS
RLQGSPGEGW KWGGCSEDIE FGGMVSREFA
DARENRPDAR SAMNRHNNEA GRQAIASHMH
LKCKCHGLSG SCEVKTCWWS QPDFRTIGDF
LKDKYDSASE MVVEKHRESR GWVETLRPRY
TYFKVPTERD LVYYEASPNF CEPNPETGSF
GTRDRTCNVS SHGIDGCDLL CCGRGHNART
ERRREKCHCV FHWCCYVSCQ ECTRVYDVHT CK

Amino acids 19 to 352

Additional sequence information ab81484 is a monomeric glycoprotein containing 334 amino acid residues. This protein is the

mature full length (aa19-352), it does not contain the signal peptide from aa 1-18.

Specifications

Our Abpromise guarantee covers the use of ab81484 in the following tested applications.

1

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

Applications Cell Differentiation

SDS-PAGE

Cellular Activation

HPLC

Form Lyophilized

Additional notes Endotoxin level is less than 0.2 ng per μg (2EU/μg).

Formulation: Sterile filtered through a 0.2 micron filter. Lyophilized from 10mM Sodium

Phosphate, pH 7.5 + 500mM NaCl + 0.5% CHAPS.

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at 4°C (up to 6 months). The lyophilized protein is stable for a few weeks at

room temperature. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Constituent: 13% CHAPS

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution Reconstitute to a concentration of 0.1 mg/mL with ddH₂O. Store at 4°C for up to 1 week or dilute

further in a buffer containing a carrier protein or stabilizer and store working aliquots at -20°C to -

80°C for up to 3 months.

General Info

Function Ligand for members of the frizzled family of seven transmembrane receptors. Wnt-3 and Wnt-3a

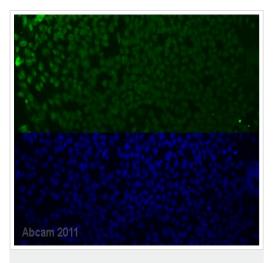
play distinct roles in cell-cell signaling during morphogenesis of the developing neural tube.

Tissue specificityModerately expressed in placenta and at low levels in adult lung, spleen, and prostate.

Sequence similarities Belongs to the Wnt family.

Cellular localization Secreted > extracellular space > extracellular matrix.

Images



Cell differentiation - Recombinant mouse Wnt3a protein (ab81484)

This image is courtesy of Emily Moorefield, Wake Forest Institute for Regenerative Medicine, NC, USA

Human embryonic stem cells (HUES4) were differentiated as monolayer cultures on matrigel coated dishes using a protocol described in Kroon et al, Nat Biotechnol. (2008). Inhibin beta A (ab50051) and Wnt3a (ab81484) were added to cultures to direct differentiation towards definitive endoderm. This image was taken 3 days after induction, where the definitive endoderm marker FOXA2 (ab40874 in green) is abundant. Dapi staining is shown in blue. Magnification: 200x. Negative controls of fluorescently conjugated secondary antibodies only showed no staining.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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