abcam

Product datasheet

Recombinant human c-Kit protein (Fc Chimera Active) ab219878

3 图像

描述

产品名称 重组人c-Kit蛋白(Fc Chimera Active)

生物活性 Measured by its binding ability in a functional ELISA. Immobilized ab219878 at 2 μg/ml (100

μl/well) can bind Mouse SCF, His Tag with a linear range of 0.05-1.2 ng/ml.

Measured by its binding ability in a functional ELISA. Immobilized ab219878 at 2 µg/ml (100

μl/well) can bind Biotinylated Mouse SCF with a linear range of 0.25-20 ng/ml.

Immobilized ab219878 at 2 µg/mL (100 µL/well) can bind ab219878 with a linear range of 0.4-2

ng/mL (QC tested).

纯**度** > 95 % SDS-PAGE.

 内毒素水平
 < 1.000 Eu/μg</td>

 表达系统
 HEK 293 cells

Accession P10721-2

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

种属 Human

序列 QPSVSPGEPSPPSIHPGKSDLIVRVGDEIRLLCTDPGFVKWT

FEILDETN

ENKQNEWITEKAEATNTGKYTCTNKHGLSNSIYVFVRDPAKL

FLVDRSLY

 ${\tt GKEDNDTLVRCPLTDPEVTNYSLKGCQGKPLPKDLRFIPDPK}$

AGIMIKSV

KRAYHRLCLHCSVDQEGKSVLSEKFILKVRPAFKAVPVVSVS

KASYLLRE

GEEFTVTCTIKDVSSSVYSTWKRENSQTKLQEKYNSWHHGDF

NYERQATL

TISSARVNDSGVFMCYANNTFGSANVTTTLEVVDKGFINIFP

MINTTVFV

NDGENVDLIVEYEAFPKPEHQQWIYMNRTFTDKWEDYPKSEN

ESNIRYVS

ELHLTRLKGTEGGTYTFLVSNSDVNAAIAFNVYVNTKPEILT

YDRLVNGM

LQCVAAGFPEPTIDWYFCPGTEQRCSASVLPVDVQTLNSSGP

1

PFGKLVVQ

SSIDSSAFKHNGTVECKAYNDVGKTSAYFNFAFKEQIHPHT

预测分子量 82 kDa including tags

分子量信息 The protein has a calculated MW of 81.9 kDa. The protein migrates as 116-130 kDa under

reducing (R) condition (SDS-PAGE) due to glycosylation.

氨基酸 26 to 516

标签 Fc tag C-Terminus

额外的序列信息 Fused with a human lgG1 Fc tag at the C-terminus.

技术指标

Our Abpromise quarantee covers the use of ab219878 in the following tested applications.

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

应**用** ELISA

SDS-PAGE

形式 Lyophilized

补充说明 This product is stable after storage at:

-20°C to -70°C for 12 months in lyophilized state;

-70°C for 3 months under sterile conditions after reconstitution.

制备和贮存

稳定性和存储 Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.4

Constituents: 0.61% Tris, 0.75% Glycine, 5% Trehalose, L-Arginine, Sodium chloride

Lyophilized from 0.22 µm filtered solution.

5-10% trehalose is commonly used for freeze drying, and after reconstitution, the trehalose is

mostly about 3-5%

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

复溶 Reconstitute with sterile deionized water to a concentration of 200 µg/ml.

常规信息

功能

Tyrosine-protein kinase that acts as cell-surface receptor for the cytokine KITLG/SCF and plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. In response to KITLG/SCF binding, KIT can activate several signaling pathways. Phosphorylates PIK3R1, PLCG1, SH2B2/APS and CBL. Activates the AKT1 signaling pathway by phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Activated KIT also transmits signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. Promotes activation of STAT family members STAT1, STAT3, STAT5A and STAT5B. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. KIT signaling is modulated by protein phosphatases, and by rapid internalization and degradation of the receptor. Activated KIT

promotes phosphorylation of the protein phosphatases PTPN6/SHP-1 and PTPRU, and of the transcription factors STAT1, STAT3, STAT5A and STAT5B. Promotes phosphorylation of PIK3R1, CBL, CRK (isoform Crk-II), LYN, MAPK1/ERK2 and/or MAPK3/ERK1, PLCG1, SRC and SHC1.

组织特异性

lsoform 1 and isoform 2 are detected in spermatogonia and Leydig cells. Isoform 3 is detected in round spermatids, elongating spermatids and spermatozoa (at protein level). Widely expressed. Detected in the hematopoietic system, the gastrointestinal system, in melanocytes and in germ cells.

疾病相关

Piebald trait

Gastrointestinal stromal tumor Testicular germ cell tumor Leukemia, acute myelogenous

序列相似性

Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.

Contains 5 lg-like C2-type (immunoglobulin-like) domains.

Contains 1 protein kinase domain.

翻译后修饰

Ubiquitinated by SOCS6. KIT is rapidly ubiquitinated after autophosphorylation induced by KITLG/SCF binding, leading to internalization and degradation.

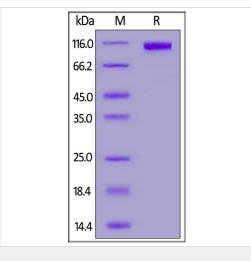
Autophosphorylated on tyrosine residues. KITLG/SCF binding enhances autophosphorylation. Isoform 1 shows low levels of tyrosine phosphorylation in the absence of added KITLG/SCF (in vitro). Kinase activity is down-regulated by phosphorylation on serine residues by protein kinase C family members. Phosphorylation at Tyr-568 is required for interaction with PTPN11/SHP-2, CRK (isoform Crk-II) and members of the SRC tyrosine-protein kinase family. Phosphorylation at Tyr-570 is required for interaction with PTPN6/SHP-1. Phosphorylation at Tyr-703, Tyr-823 and Tyr-936 is important for interaction with GRB2. Phosphorylation at Tyr-721 is important for interaction with PIK3R1. Phosphorylation at Tyr-823 and Tyr-936 is important for interaction with GRB7.

细胞定位

Cell membrane and Cytoplasm. Detected in the cytoplasm of spermatozoa, especially in the

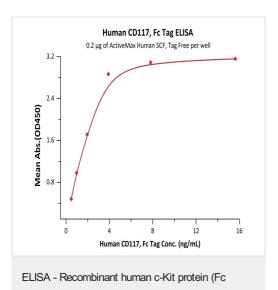
equatorial and subacrosomal region of the sperm head.

图片



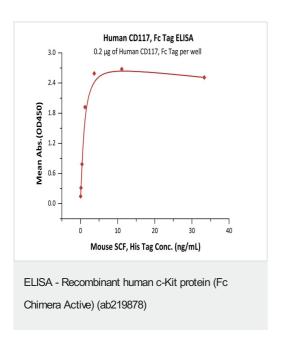
SDS-PAGE - Recombinant human c-Kit protein (Fc Chimera Active) (ab219878)

Human CD117, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.



Chimera Active) (ab219878)

Immobilized ActiveMax Human SCF, Tag Free at 2 μ g/mL (100 μ L/well) can bind Human CD117, Fc Tag with a linear range of 0.4-2 ng/mL (QC tested).



Human CD1117, Fc Tag (ab219878) at 2 ug/mL (100 uL/well) can bind Mouse SCF, His Tag ($\underline{ab221333}$) with a linear range of 0.05-1 ng/mL.

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