# abcam

# Product datasheet

# Recombinant human ZAP70 protein ab60963

# 2图像

# 描述

产品名称 重组人ZAP70蛋白

纯**度** > 95 % Densitometry.

Affinity purified.

表达系统 Baculovirus infected Sf9 cells

Accession P43403

**蛋白长度** Full length protein

无动物成分 No

性质 Recombinant

种属 Human

预**测分子量** 96 kDa including tags

**氨基酸** 1 to 619

标签 GST tag N-Terminus

#### 技术指标

Our Abpromise guarantee covers the use of ab60963 in the following tested applications.

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

应用 Functional Studies

形式 Liquid

补充说明 <u>ab204877</u> (Poly (4:1 Glu, Tyr) peptide) can be utilized as a substrate for assessing kinase activity

### 制备和贮存

稳**定性和存储** Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCI, 0.00292%

EDTA, 25% Glycerol, 0.87% Sodium chloride

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

功能 Plays a role in T-cell development and lymphocyte activation. Essential for TCR-mediated IL-2

production. Isoform 1 induces TCR-mediated signal transduction, isoform 2 does not.

组织**特异性** Expressed in T- and natural killer cells.

疾病相关 Defects in ZAP70 are the cause of selective T-cell defect (STD) [MIM:176947]. STD is an

autosomal recessive form of severe combined immunodeficiency characterized by a selective

absence of CD8-type T-cells.

**序列相似性** Belongs to the protein kinase superfamily. Tyr protein kinase family. SYK/ZAP-70 subfamily.

Contains 1 protein kinase domain.

Contains 2 SH2 domains.

结**构域** The SH2 domains bind to the phosphorylated tyrosine-based activation motif (TAM) of CD3Z and

the non-canonical phosphorylated tyrosine-based activation motif (TAM) of RHOH.

翻译后修饰 Phosphorylated on tyrosine residues upon T-cell antigen receptor (TCR) stimulation. Tyr-319

phosphorylation is essential for full activity.

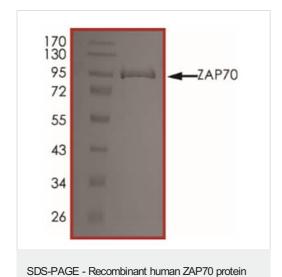
细胞定位 Cytoplasm. Cell membrane. After antigen stimulation, isoform 1 concentrates at the

immunological synapse and isoform 2 remains cytoplasmic. Co-localizes together with RHOH in the immunological synapse. RHOH is required for its proper localization to the cell membrane and

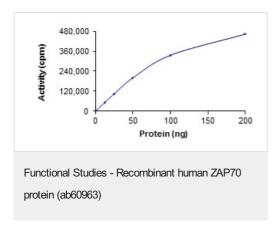
cytoskeleton fractions in the thymocytes.

#### 图片

(ab60963)



SDS PAGE analysis of ab60963



The specific activity of ZAP70 (ab60963) was determined to be 129 nmol/min/mg as per activity assay protocol

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 <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

#### Terms and conditions

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