# abcam

## Product datasheet

## Recombinant human CD45 protein ab42584

製品の詳細

製品名 Recombinant human CD45 protein

生理活性 Specific Activity: 26 U/μg. One unit will hydrolyze 1 nmol p-nitrophenyl phosphate per minute at pH

7.4 and 30°C. Assay buffer: 50 mM HEPES, pH 7.4, 2 mM EDTA, 3mM DTT, 100 mM NaCl, 50

mM pNPP. The specific activity of CD45 was determined using pNPP. Enzyme reaction

condition: 20 mM pNPP, 2 min incubation at 30 °C,  $2\mu g/ml$  enzyme.

精製度 > 90 % SDS-PAGE.

Affinity purified.

**発現系** Baculovirus infected Sf9 cells

タンパク質長 Protein fragment

Animal free No

**由来** Recombinant

生物種 Human

**領域** 584 to 1256

特性

Our **Abpromise guarantee** covers the use of **ab42584** in the following tested applications.

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

アプリケーション Functional Studies

製品の状態 Liquid

備考 Protein was expressed in a Baculovirus Sf9 expression system. Expected molecular weight

75kDa.

前処理および保存

保存方法および安定性 Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.077% (R\*,R\*)-1,4-Dimercaptobutan-2,3-diol, 0.395% Tris HCl, 0.05% Tween,

50% Glycerol (glycerin, glycerine), 0.435% Sodium chloride

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

1

#### 関連情報

### 機能 Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor.

Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first

one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN.

関連疾患 Defects in PTPRC are a cause of severe combined immunodeficiency autosomal recessive T-

cell-negative/B-cell-positive/NK-cell-positive (T(-)B(+)NK(+) SCID) [MIM:608971]. A form of severe combined immunodeficiency (SCID), a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients present in infancy recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID

is absence of T-cell-mediated cellular immunity due to a defect in T-cell development.

Genetic variations in PTPRC are involved in multiple sclerosis susceptibility (MS) [MIM:126200]. MS is a neurodegenerative disorder characterized by the gradual accumulation of focal plaques of demyelination particularly in the periventricular areas of the brain. Peripheral nerves are not affected. Onset usually in third or fourth decade with intermittent progression over an extended

period. The cause is still uncertain.

配列類似性 Belongs to the protein-tyrosine phosphatase family. Receptor class 1/6 subfamily.

Contains 2 fibronectin type-III domains.

Contains 2 tyrosine-protein phosphatase domains.

The first PTPase domain interacts with SKAP1.

翻訳後修飾 Heavily N- and O-glycosylated.

細胞内局在 Membrane. Membrane raft. Colocalized with DPP4 in membrane rafts.

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.co.jp/abpromise">https://www.abcam.co.jp/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