# abcam

## Product datasheet

## Anti-CPS1 antibody ab3682

★★★★★ 9 Abreviews 21 References 3 图像

#### 概述

产品名称 Anti-CPS1抗体

描述 兔多克隆抗体to CPS1

**宿主** Rabbit

特异性 When the antibody is used at 1/2000 some lower molecular weight bands appear in COS-7 cells,

the extent of which is significantly reduced when the antibody is used at 1/10,000.

经测试应用 适用于: IHC-Fr, IHC-P, IP, ICC/IF, WB

种属反应性 与反应: Mouse, Rat, African green monkey

免疫原 Full length native protein (purified) corresponding to Rat CPS1.

常规说明 OMIM reference: 114010 Alternative name: carbamoylphosphate synthetase 1, CAD

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Add glycerol to a final volume of 50% for

extra stability and aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

存储溶液 Preservative: 0.02% Sodium azide

纯**度** Whole antiserum

应用

The Abpromise guarantee Abpromise™承诺保证使用ab3682于以下的经测试应用

1

#### "应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-Fr	<b>★★★★★ (2)</b>	Use at an assay dependent concentration.
IHC-P	**** <u>(1)</u>	Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
ICC/IF	*** <u>*</u>	Use at an assay dependent concentration.
WB	<b>★★★★</b> <u>(5)</u>	Use at an assay dependent concentration.

#### 靶标

功能 Involved in the urea cycle of ureotelic animals where the enzyme plays an important role in removing excess ammonia from the cell.

组织特异性 Primarily in the liver and small intestine.

疾病相关 Defects in CPS1 are the cause of carbamoyl phosphate synthetase 1 deficiency (CPS1D)

[MIM:237300]. CPS1D is an autosomal recessive disorder of the urea cycle causing

hyperammonemia. Clinical features include protein intolerance, intermittent ataxia, seizures,

lethargy, developmental delay and mental retardation.

Note=Genetic variations in CPS1 influence the availability of precursors for nitric oxide (NO) synthesis and play a role in clinical situations where endogenous NO production is critically important, such as neonatal pulmonary hypertension, increased pulmonary artery pressure

following surgical repair of congenital heart defects or hepatovenocclusive disease following bone marrow transplantation. Infants with neonatal pulmonary hypertension homozygous for Thr-1406

have lower L-arginine concentrations than neonates homozygous for Asn-1406.

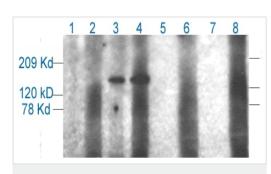
序列相似性 Contains 2 ATP-grasp domains.

Contains 1 glutamine amidotransferase type-1 domain.

结**构域** The type-1 glutamine amidotransferase domain is defective.

细胞定位 Mitochondrion.

#### 图片



Western blot - Anti-CPS1 antibody (ab3682)

Lane 1: 5 ul of 2ml lysate cos-7 cells transfected with full length CPS

1. Before IP

Lane 2: cos-7 cells transfected with full length CPS 1. IP with 5 ul of pre-immune serum

Lane 3: cos-7 cells transfected with full length CPS 1. IP with 2 ul of polyclonal antibody anti CPS 1 (ab3682)

Lane 4: cos-7 cells transfected with full length CPS 1. IP with 5 ul of polyclonal antibody anti CPS 1 (ab3682)

Lane 5: 5 ul of 2ml lysate cos-7 cells transfected with empty vector (pCMV5-tr). Before IP

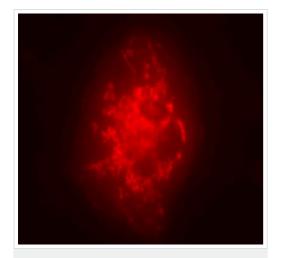
Lane 6: cos-7 cells transfected with empty vector (pCMV5-tr). IP with 5 ul of polyclonal antibody anti CPS 1 (ab3682)

Lane 7: 5 ul of 2ml lysate untransfected cos-7 cells. Before IP

Lane 8: untransfected cos-7 cells. IP with 5 ul of polyclonal antibody anti CPS 1 (ab3682) Ab3682 can IP CPS1 transiently expressed in COS-7 cells.

Lane 1: 5 ul of 2ml lysate cos-7 cells transfected with full length CPS 1. Before IP

Lane 2: cos-7 cells transfected with full length CPS 1. IP

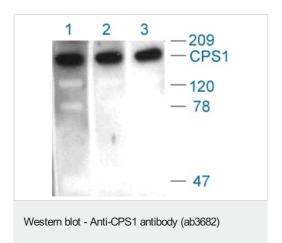


Immunocytochemistry/ Immunofluorescence - Anti-CPS1 antibody (ab3682)

CPS-1 localisation is consistent with the reticulated pattern of liver mitonchondria.

Rabbit polyclonal to CPS-1 (ab3682), at 1/5000 on COS-7 (African green monkey kidney fibroblast-like cell line) cells transiently transfected with pCMV5-CPS 1 plasmid (Corvi, M.M and Berthiaume, L.G. unpublished data).

Secondary: donkey anti-rabbit (Texas Red).



Western blot using Rabbit polyclonal to CPS 1 (ab3682). All lanes loaded with 100 ng of purified CPS 1

Lane 1: ab3682 1/500 Lane 2: ab3682 1/1000

Lane 3: ab3682 1/2000 Western blot using Rabbit polyclonal to

CPS 1 (ab3682).

All lanes loaded with 100 ng of purified CPS 1

Lane 1: ab3682 1/500 Lane 2: ab3682 1/1000 Lane 3: ab3682 1/2000

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