# abcam

## Product datasheet

# Anti-CPS1 antibody ab3682

★★★★★ 9 Abreviews 21 References 画像数 3

#### 製品の概要

製品名 Anti-CPS1 antibody

製品の詳細 Rabbit polyclonal to CPS1

由来種 Rabbit

特異性 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.

アプリケーション 適用あり: IHC-Fr, IHC-P, IP, ICC/IF, WB

**種交差性 交差種:** Mouse, Rat, African green monkey

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

特記事項 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

#### 製品の特性

製品の状態 Liquid

保存方法 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.

ארע"א Preservative: 0.02% Sodium azide

精製度 Whole antiserum

**ポリ/モノ** ポリクローナル

アイソタイプ IgG

アプリケーション

The Abpromise guarantee

Abpromise保証は、次のテスト済みアプリケーションにおけるab3682の使用に適用されます

#### アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-Fr	*** <u>*</u>	Use at an assay dependent concentration.
IHC-P	*** <u>*</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>★★★★ (5)</b>	Use at an assay dependent concentration.

#### ターゲット情報

機能 Involved in the urea cycle of ureotelic animals where the enzyme plays an important role in

removing excess ammonia from the cell.

組織特異性 Primarily in the liver and small intestine.

**関連疾患** 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.

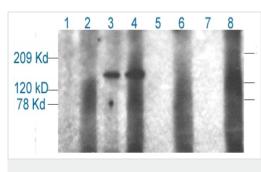
配列類似性 Contains 2 ATP-grasp domains.

Contains 1 glutamine amidotransferase type-1 domain.

ドメイン The type-1 glutamine amidotransferase domain is defective.

細胞内局在 Mitochondrion.

#### 画像



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

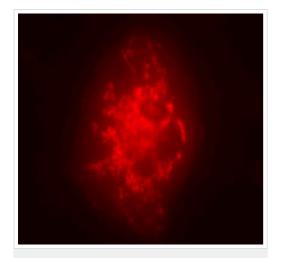
Lane 6: cos-7 cells transfected with empty vector (pCMV5-tr). IP with 5 ul of polyclonal antibody anti CPS 1 (ab3682)

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

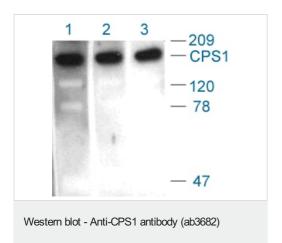


Immunocytochemistry/ Immunofluorescence - Anti-CPS1 antibody (ab3682)

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

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