## abcam

#### Product datasheet

### Anti-LysRS antibody [EPR7921] ab129080

יעלצעבע RabMAb

4 References 画像数5

#### 製品の概要

製品名 Anti-LysRS antibody [EPR7921]

製品の詳細 Rabbit monoclonal [EPR7921] to LysRS

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, ICC/IF

適用なし: Flow Cyt

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 🔷

免疫原 Synthetic peptide corresponding to Human LysRS aa 550-650.

Database link: Q15046

ポジティブ・コントロール Jurkat, HeLa, 293T, HepG2, and Caco 2 cell lysates; Human colon tissue This antibody gave a

positive result when used in the following methanol fixed cell lines: CACO-2

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

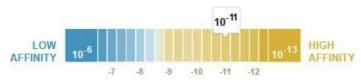
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 1.44 \times 10^{-11} M$ 解離定数(KD値)



Learn more about K<sub>D</sub>

**バッファー** pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**クローン名** EPR7921

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ab129080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
WB		1/1000 - 1/10000. Detects a band of approximately 74 kDa (predicted molecular weight: 68 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.

追加情報

Is unsuitable for Flow Cyt.

#### ターゲット情報

#### 機能

Catalyzes the specific attachment of an amino acid to its cognate tRNA in a 2 step reaction: the amino acid (AA) is first activated by ATP to form AA-AMP and then transferred to the acceptor end of the tRNA. When secreted, acts as a signaling molecule that induces immune response through the activation of monocyte/macrophages. Catalyzes the synthesis of diadenosine oligophosphate (Ap4A), a signaling molecule involved in the activation of MITF transcriptional activity. Interacts with HIV-1 virus GAG protein, facilitating the selective packaging of tRNA(3) (Lys), the primer for reverse transcription initiation.

関連疾患

Defects in KARS are the cause of Charcot-Marie-Tooth disease recessive intermediate type B (CMTRIB) [MIM:613641]; also called Charcot-Marie-Tooth neuropathy recessive intermediate B. CMTRIB is a form of Charcot-Marie-Tooth disease, a disorder of the peripheral nervous system, characterized by progressive weakness and atrophy, initially of the peroneal muscles and later of the distal muscles of the arms. Recessive intermediate forms of Charcot-Marie-Tooth disease are characterized by clinical and pathologic features intermediate between demyelinating and axonal peripheral neuropathies, and motor median nerve conduction velocities ranging from 25 to 45 m/sec.

配列類似性

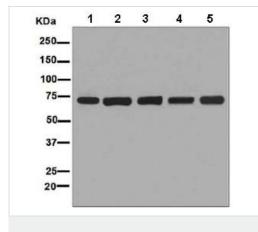
Belongs to the class-II aminoacyl-tRNA synthetase family.

ドメイン

The N-terminal domain (1-65) of the cytoplasmic isoform is a functional tRNA-binding domain (By similarity), is required for nuclear localization, is involved in the interaction with DARS, but has a repulsive role in the binding to EEF1A1. A central domain (208-259) is involved in homodimerization and is required for interaction with HIV-1 GAG and incorporation into virions.

Mitochondrion and Cytoplasm. Nucleus. Cell membrane. Secreted. Secretion is induced by TNF-alpha.

#### 画像



Western blot - Anti-LysRS antibody [EPR7921] (ab129080)

**All lanes :** Anti-LysRS antibody [EPR7921] (ab129080) at 1/1000 dilution

Lane 1: Jurkat cell lysate
Lane 2: HeLa cell lysate
Lane 3: 293T cell lysate
Lane 4: HepG2 cell lysate
Lane 5: Caco-2 cell lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

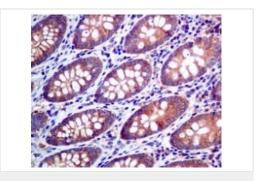
All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 68 kDa



Immunocytochemistry/ Immunofluorescence - Anti-LysRS antibody [EPR7921] (ab129080)

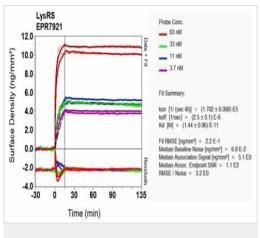
ICC/IF image of ab129080 stained CACO-2 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab129080 at 1/200 dilution overnight at +4°C. The secondary antibody (pseudo-colored green) was Alexa Fluor® 488 goat antirabbit (ab150081) IgG (H+L) preadsorbed, used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1h at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43 $\mu$ M for 1hour at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LysRS antibody
[EPR7921] (ab129080)

ab129080, at a dilution of 1/50, staining LysRS in paraffin embedded Human colon tissue by immunohistochemistry.

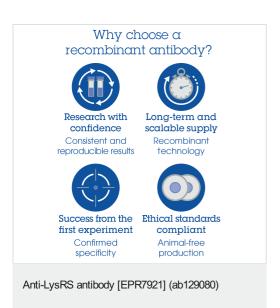
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Ol-RD Scanning - Anti-LysRS antibody [EPR7921] (ab129080)

Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

Click here to learn more about KD



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