abcam

Product datasheet

Anti-Glutathione Synthetase antibody [EPR6563] ab133592



יעלטעבע RabMAb

7 References 画像数6

製品の概要

製品名 Anti-Glutathione Synthetase antibody [EPR6563]

製品の詳細 Rabbit monoclonal [EPR6563] to Glutathione Synthetase

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, Flow Cyt (Intra)

適用なし: №

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 within Human Glutathione Synthetase aa 350-450 (internal sequence). The

> exact sequence is proprietary. (Peptide available as ab211544)

ポジティブ・コントロール 293T, HeLa, Daudi and HT-1080 cell lysates; Human colon tissue

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.

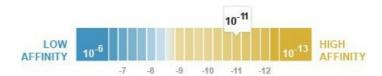
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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.

 $K_D = 2.74 \times 10^{-11} M$ 解離定数(KD値)



Learn more about K_D

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 EPR6563

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab133592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. Predicted molecular weight: 52 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/100 - 1/1000. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

追加情報 Is unsuitable for IP.

ターゲット情報

パスウェイ Sulfur metabolism; glutathione biosynthesis; glutathione from L-cysteine and L-glutamate: step

2/2.

関連疾患 Defects in GSS are the cause of glutathione synthetase deficiency (GSS deficiency)

[MIM:266130]; also known as 5-oxoprolinuria or pyroglutamic aciduria. It is a severe form characterized by an increased rate of hemolysis and defective function of the central nervous

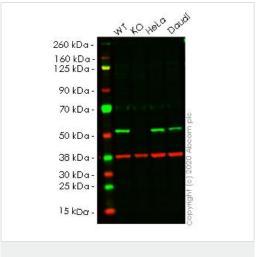
system.

Defects in GSS are the cause of glutathione synthetase deficiency of erythrocytes (GLUSYNDE) [MIM:231900]. Glutathione synthetase deficiency of erythrocytes is a mild form causing hemolytic

anemia.

配列類似性 Belongs to the eukaryotic GSH synthase family.

画像



Western blot - Anti-Glutathione Synthetase antibody [EPR6563] (ab133592)

All lanes : Anti-Glutathione Synthetase antibody [EPR6563] (ab133592) at 1/1000 dilution

Lane 1: Wild-type HEK-293T cell lysate

Lane 2: GSS knockout HEK-293T cell lysate

Lane 3 : HeLa cell lysate

Lane 4 : Daudi cell lysate

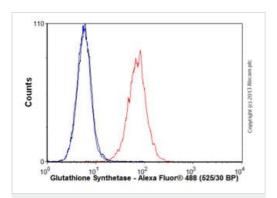
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 52 kDa
Observed band size: 50 kDa

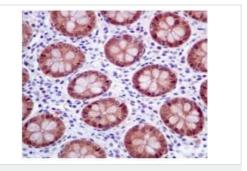
Lanes 1-4: Merged signal (red and green). Green - ab133592 observed at 50 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) observed at 37 kDa.

ab133592 was shown to react with GSS in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line ab266342 (knockout cell lysate ab257460) was used. Wild-type HEK-293T and GSS knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab133592 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye®680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Flow Cytometry (Intracellular) - Anti-Glutathione Synthetase antibody [EPR6563] (ab133592)

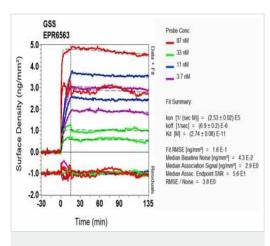
Overlay histogram showing Jurkat cells stained with ab133592 (red line). The cells were fixed with 80% methanol (5 min)/ and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab133592, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor[®] 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Glutathione Synthetase antibody [EPR6563] (ab133592)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labelling Glutathione Synthetase with ab133592 at 1/50 dilution.

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

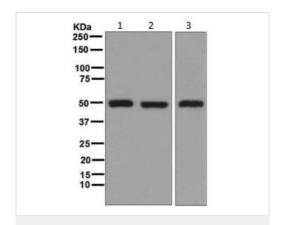


OI-RD Scanning - Anti-Glutathione Synthetase antibody [EPR6563] (ab133592)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Western blot - Anti-Glutathione Synthetase antibody [EPR6563] (ab133592)

All lanes : Anti-Glutathione Synthetase antibody [EPR6563] (ab133592) at 1/1000 dilution

Lane 1 : 293T cell lysate

Lane 2 : HeLa cell lysate

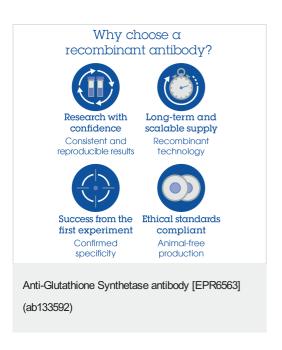
Lane 3: HT-1080 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labelled Goat anti-Rabbit lgG at 1/2000 dilution

Predicted band size: 52 kDa



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