

Product datasheet

Anti-CBS antibody [EPR8578] ab131155

KO VALIDATED Recombinant RabMAB[®]

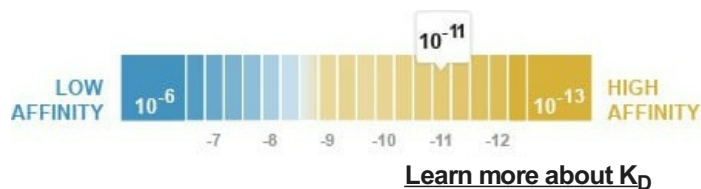
[3 References](#) [4 Images](#)

Overview

Product name	Anti-CBS antibody [EPR8578]
Description	Rabbit monoclonal [EPR8578] to CBS
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal liver tissue lysate; HeLa and Raji cell lysates.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 6.78 x 10 ⁻¹¹ M



Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR8578
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab131155 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

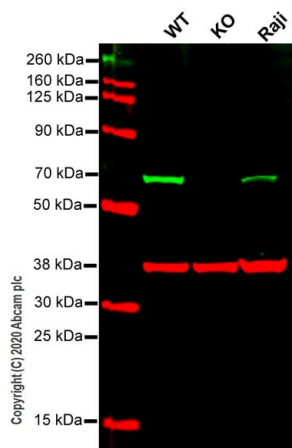
Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 61 kDa.

Application notes Is unsuitable for Flow Cyt, ICC/IF, IHC-P or IP.

Target

Function	Only known pyridoxal phosphate-dependent enzyme that contains heme. Important regulator of hydrogen sulfide, especially in the brain, utilizing cysteine instead of serine to catalyze the formation of hydrogen sulfide. Hydrogen sulfide is a gastratransmitter with signaling and cytoprotective effects such as acting as a neuromodulator in the brain to protect neurons against hypoxic injury.
Tissue specificity	In the adult strongly expressed in liver and pancreas, some expression in heart and brain, weak expression in lung and kidney. In the fetus, expressed in brain, liver and kidney.
Pathway	Amino-acid biosynthesis; L-cysteine biosynthesis; L-cysteine from L-homocysteine and L-serine: step 1/2.
Involvement in disease	Defects in CBS are the cause of cystathionine beta-synthase deficiency (CBSD) [MIM:236200]. CBSD is an enzymatic deficiency resulting in altered sulfur metabolism and homocystinuria. The clinical features of untreated homocystinuria due to CBS deficiency include myopia, ectopia lentis, mental retardation, skeletal anomalies resembling Marfan syndrome, and thromboembolic events. Light skin and hair can also be present. Biochemical features include increased urinary homocystine and methionine.
Sequence similarities	Belongs to the cysteine synthase/cystathionine beta-synthase family. Contains 1 CBS domain.
Cellular localization	Cytoplasm. Nucleus.

Images



Western blot - Anti-CBS antibody [EPR8578] (ab131155)

All lanes : Anti-CBS antibody [EPR8578] (ab131155) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : CBS knockout HeLa cell lysate

Lane 3 : Raji cell lysate

Lysates/proteins at 20 µg per lane.

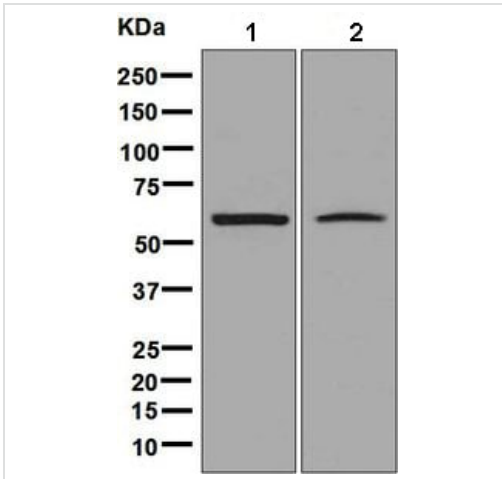
Performed under reducing conditions.

Predicted band size: 61 kDa

Observed band size: 70 kDa

Lanes 1-3: Merged signal (red and green). Green - ab131155 observed at 70 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab131155 Anti-CBS antibody [EPR8578] was shown to specifically react with CBS in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab264950** (knockout cell lysate **ab257203**) was used. Wild-type and CBS knockout samples were subjected to SDS-PAGE. ab131155 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-CBS antibody [EPR8578]
(ab131155)

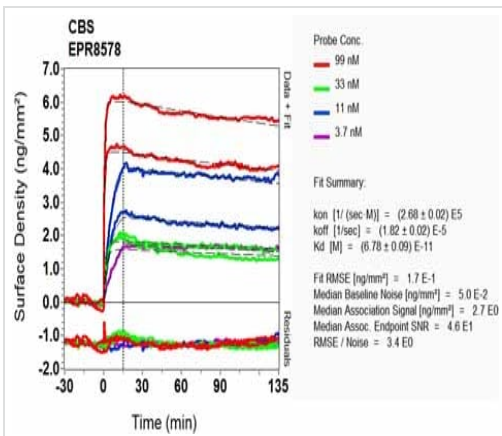
All lanes : Anti-CBS antibody [EPR8578] (ab131155) at 1/1000 dilution

Lane 1 : Fetal liver lysate

Lane 2 : Raji cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 61 kDa



SPR Scanning - Anti-CBS antibody [EPR8578]
(ab131155)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a recombinant antibody?

Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-CBS antibody [EPR8578] (ab131155)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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