

# **Product datasheet**

# Anti-SLC25A13/Citrin antibody [EPR9969(B)] - BSA and Azide free ab249408

KO VALIDATED Recombinant RabMAb

3 Images

Overview		
Product name	Anti-SLC25A13/Citrin antibody [EPR9969(B)] - BSA and Azide free	
Description	Rabbit monoclonal [EPR9969(B)] to SLC25A13/Citrin - BSA and Azide free	
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: HeLa, HAP1 and SH-5YSY cell lysates.	
General notes	ab249408 is the carrier-free version of <u>ab167166</u> .	
	Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.	
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.	
	Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.	
	This product is compatible with the Maxpar <sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar <sup>®</sup> is a trademark of Fluidigm Canada Inc.	
	This product is a recombinant monoclonal antibody, which offers several advantages including:	
	<ul> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit</li> </ul>	
	monoclonal antibodies. For details on our patents, please refer to <b>RabMAb<sup>®</sup> patents</b> .	

### Properties

Form	Liquid	
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.	
Storage buffer	pH: 7.2 Constituent: PBS	
Carrier free	Yes	
Purity	Protein A purified	
Clonality	Monoclonal	
Clone number	EPR9969(B)	
Isotype	lgG	

## Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab249408 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		Use at an assay dependent concentration. Predicted molecular weight: 70 kDa.

**Application notes** 

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

Target		
Function	Catalyzes the calcium-dependent exchange of cytoplasmic glutamate with mitochondrial aspartate across the mitochondrial inner membrane. May have a function in the urea cycle.	
Tissue specificity	High levels in liver and low levels in kidney, pancreas, placenta, heart and brain.	
Involvement in disease	<ul> <li>Defects in SLC25A13 are the cause of citrullinemia type 2 (CTLN2) [MIM:603471]. Citrullinemia belongs to the urea cycle disorders. It is an autosomal recessive disease characterized primarily by elevated serum and urine citrulline levels. Ammonia intoxication is another manifestation. CTLN2 is characterized by neuropsychiatric symptoms including abnormal behaviors, loss of memory, seizures and coma. Death can result from brain edema. Onset is sudden and usually between the ages of 20 and 50 years.</li> <li>Defects in SLC25A13 are the cause of neonatal intrahepatic cholestasis due to citrin deficiency (NICCD) [MIM:605814]. NICCD is a form of citrullinemia type 2 with neonatal onset. NICCD is characterized by suppression of the bile flow, hepatic fibrosis, low birth weight, growth retardation, hypoproteinemia, variable liver dysfunction. NICCD is generally not severe and symptoms disappear by one year of age with an appropriate diet. Years or even decades later, however, some individuals develop the characteristic features of citrullinemia type 2 with neuropsychiatric symptoms.</li> </ul>	
Sequence similarities	Belongs to the mitochondrial carrier family. Contains 4 EF-hand domains. Contains 3 Solcar repeats.	

#### Images





All lanes : Anti-SLC25A13/Citrin antibody [EPR9969(B)] (ab167166) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate Lane 2 : SLC25A13 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 70 kDa Observed band size: 70 kDa

This data was developed using the same antibody clone in a different buffer formulation (<u>ab167166</u>).

Lanes 1-2: Merged signal (red and green). Green - <u>ab167166</u> observed at 70 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (<u>ab8245</u>) observed at 37 kDa.

**ab167166** was shown to react with SLC25A13 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line **ab265668** (knockout cell lysate **ab258192**) was used. Wild-type HeLa and SLC25A13 knockout HeLa 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. **ab167166** 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 IgG H&L (IRDye<sup>®</sup>680RD) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup>680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-SLC25A13/Citrin antibody [EPR9969(B)] - BSA and Azide free (ab249408)

All lanes : Anti-SLC25A13/Citrin antibody [EPR9969(B)] (ab167166) at 1/500 dilution

Lane 1 : Wild-type HAP1 cell lysate Lane 2 : SLC25A13 knockout HAP1 cell lysate Lane 3 : SH-5YSY cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 70 kDa

This data was developed using the same antibody clone in a different buffer formulation (<u>ab167166</u>).

Lanes 1 - 3: Merged signal (red and green). Green - <u>ab167166</u> observed at 70 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

<u>ab167166</u> was shown to recognize SLC25A13 when SLC25A13 knockout samples were used, along with additional cross-reactive bands. Wild-type and SLC25A13 knockout samples were subjected to SDS-PAGE. <u>ab167166</u> and <u>ab8245</u> (loading control to GAPDH) were diluted at 1/500 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



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

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