



# Mouse Anti-ABCG8 monoclonal antibody, clone 2C20B6 (CABT-RM167)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	Detects ATP-binding cassette sub-family G member 8 (ABCG8). It targets an epitope with in the N-terminal half.
<b>Target</b>	ABCG8
<b>Immunogen</b>	Recombinant fragment corresponding to the first 350 amino acids from mouse ATP-binding cassette sub-family G member 8 (ABCG8).
<b>Isotype</b>	IgG2a, κ
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Clone</b>	2C20B6
<b>Purification</b>	Protein G purified
<b>Conjugate</b>	unconjugated
<b>Applications</b>	ICC, IHC, IP, WB
<b>Molecular Weight</b>	75.99 kDa calculated.
<b>Format</b>	Liquid
<b>Size</b>	100 µg
<b>Buffer</b>	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl
<b>Preservative</b>	0.05% sodium azide

## BACKGROUND

### Introduction

ATP-binding cassette sub-family G member 8 is encoded by the *Abcg8* gene in murine species. ABCG8 is a multi-pass membrane protein that forms an obligate heterodimer with ABCG5 to mediate Mg<sup>2+</sup> and ATP-dependent sterol transport across the cell membrane. It is required for normal sterol homeostasis and plays an essential role in the selective transport of the dietary cholesterol in and out of the enterocytes and in the selective sterol excretion by the liver into bile. ABCG8 and ABCG5 are primarily expressed in enterocytes and hepatocytes and their levels are up-regulated upon cholesterol feeding. They are shown to heterodimerize in the endoplasmic reticulum prior to being transported to apical membranes. Their ATPase catalytic domain is located N-terminal to the transmembrane domain. ABCG8 has an ABC transporter domain (aa 48-314) and a ABC transporter type-2 domain (aa 411-665). Two isoforms of ABCG8 have been described that are produced by alternative splicing. Inactivating mutations in either G5 or G8 are reported to cause sitosterolemia, a rare autosomal-recessive disorder characterized by hypercholesterolemia, phytosterolemia, and premature coronary artery disease.

### Keywords

ABCG8; ATP-binding cassette, sub-family G (WHITE), member 8; ATP binding cassette, sub family G (WHITE), member 8 (sterolin 2); ATP-binding cassette sub-family G member 8; gallbladder disease 4; GBD4; sterolin 2; sterolin-2; ATP-binding cassette, subfamily G, member 8; STSL; MGC142217

## GENE INFORMATION

### Entrez Gene ID

[67470](#)

### UniProt ID

[Q9DBM0](#)