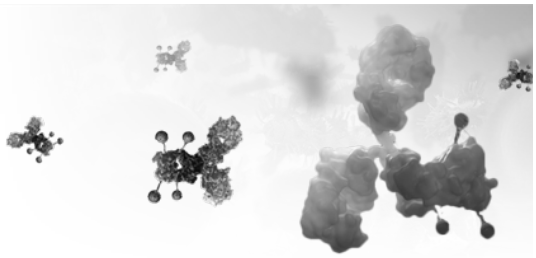

Mouse Anti-DNAJC15 monoclonal antibody, clone XfOB23 (CABT-RM170)

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

PRODUCT INFORMATION

Specificity	Detects human Methylation-controlled J protein (DNAJC15). It targets an epitope within the first 35 amino acids from the mitochondrial intermembrane N-terminal region.
Target	DNAJC15
Immunogen	KLH-conjugated linear peptide corresponding to the first 35 amino acids from the N-terminal region of human Methylation-controlled J protein (DNAJC15).
Isotype	IgG2a, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	XfOB23
Purification	Protein G purified
Conjugate	unconjugated
Applications	ICC, IHC, WB
Epitope	N-terminus
Molecular Weight	16.38 kDa calculated.
Format	Liquid
Size	100 µl
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl

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Preservative	0.05% sodium azide
Storage	Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction	DnaJ homolog subfamily C member 15 is encoded by the DNAJC15 gene in human. MCJ is a single-pass membrane protein that is highly conserved in vertebrates. It is a member of the DnaJ protein family of co-chaperones and its expression is controlled by methylation. A unique feature of MCJ is that its J domain is localized to the C-terminal region (aa 96-150). Higher expression of MCJ has been reported in heart, liver, and kidney. It localizes to the mitochondrial inner membrane and serves as an endogenous inhibitor of complex I of the respiratory chain. Loss of MCJ is shown to increase complex I activity, mitochondrial membrane potential, and mitochondrial ATP production. Loss of MCJ expression has been linked to increased resistance to antineoplastic drugs. MCJ is also shown to be essential for breast cancer cells to maintain the response to chemotherapeutic drugs. MCJ is reported to repress the expression of the ABCB1 drug transporter in breast cancer cells and the loss of MCJ expression leads to increased levels of c-Jun protein that triggers the expression of ABCB1 and thereby multidrug resistance.
Keywords	DNAJC15; DnaJ (Hsp40) homolog, subfamily C, member 15; DnaJ (Hsp40) homolog, subfamily D, member 1; DNAJD1; dnaJ homolog subfamily C member 15; MCJ; DNAJ domain-containing; methylation-controlled J protein; cell growth-inhibiting gene 22 protein; DnaJ (Hsp40) homolog, subfamily D, member 1

GENE INFORMATION

Entrez Gene ID	29103
UniProt ID	Q9Y5T4

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