

Product datasheet

Anti-GATM antibody [OT11C9] ab119269

[1 References](#) [7 Images](#)

Overview

Product name	Anti-GATM antibody [OT11C9]
Description	Mouse monoclonal [OT11C9] to GATM
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, ICC/IF, Flow Cyt (Intra)
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein corresponding to Human GATM. Produced in HEK293 cells (NP_001473). Database link: P50440
Positive control	WB: HEK-293T transfected lysate. IHC-P: Human kidney, liver, liver carcinoma or pancreas tissue Flow Cyt (Intra): HEK-293T cells. ICC/IF: COS-7 transfected cells
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 1% BSA, 50% Glycerol, PBS
Purity	Affinity purified
Purification notes	Purified from cell culture supernatant by affinity chromatography.
Clonality	Monoclonal
Clone number	OT11C9

Isotype

IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab119269 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		1/500 - 1/2000. Predicted molecular weight: 48 kDa.
IHC-P		1/150.
ICC/IF		1/100.
Flow Cyt (Intra)		1/100. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function

Catalyzes the biosynthesis of guanidinoacetate, the immediate precursor of creatine. Creatine plays a vital role in energy metabolism in muscle tissues. May play a role in embryonic and central nervous system development. May be involved in the response to heart failure by elevating local creatine synthesis.

Tissue specificity

Expressed in brain, heart, kidney, liver, lung, salivary gland and skeletal muscle tissue, with the highest expression in kidney. Biallelically expressed in placenta and fetal tissues.

Pathway

Amine and polyamine biosynthesis; creatine biosynthesis; creatine from L-arginine and glycine: step 1/2.

Involvement in disease

Defects in GATM are the cause of arginine:glycine amidinotransferase deficiency (AGAT deficiency) [MIM:612718]. AGAT deficiency is an autosomal recessive disorder characterized by developmental delay/regression, mental retardation, severe disturbance of expressive and cognitive speech, and severe depletion of creatine/phosphocreatine in the brain.

Sequence similarities

Belongs to the amidinotransferase family.

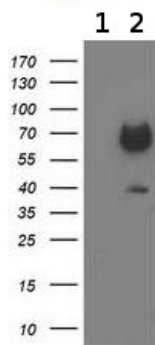
Domain

One chain folds into a compact single domain composed of repeating units, five beta-beta-alpha-beta modules, which surround the central active site.

Cellular localization

Mitochondrion inner membrane. Cytoplasm. The mitochondrial form is found in the intermembrane space probably attached to the outer side of the inner membrane.

Images



Western blot - Anti-GATM antibody [OT11C9]
(ab119269)

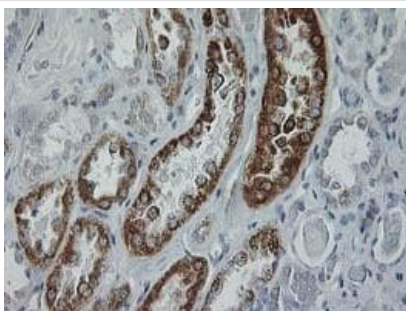
All lanes : Anti-GATM antibody [OT11C9] (ab119269) at 1/500 dilution

Lane 1 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) lysate transfected with pCMV6-ENTRY control cDNA for 48 hrs

Lane 2 : HEK-293T lysate transfected with pCMV6-ENTRY GATM cDNA for 48 hrs

Lysates/proteins at 5 µg per lane.

Predicted band size: 48 kDa



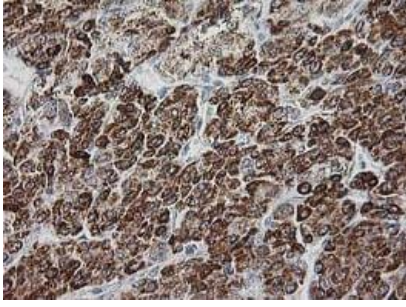
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GATM antibody [OT11C9]
(ab119269)

Paraffin-embedded human kidney tissue stained for GATM using ab119269 at 1/100 dilution in immunohistochemical analysis.



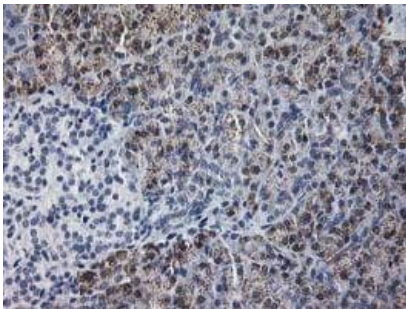
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GATM antibody [OT11C9]
(ab119269)

Paraffin-embedded human liver tissue stained for GATM using ab119269 at 1/100 dilution in immunohistochemical analysis.



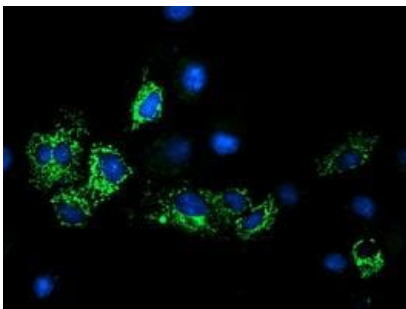
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GATM antibody [OT11C9] (ab119269)

Paraffin-embedded human liver carcinoma tissue stained for GATM using ab119269 at 1/100 dilution in immunohistochemical analysis.



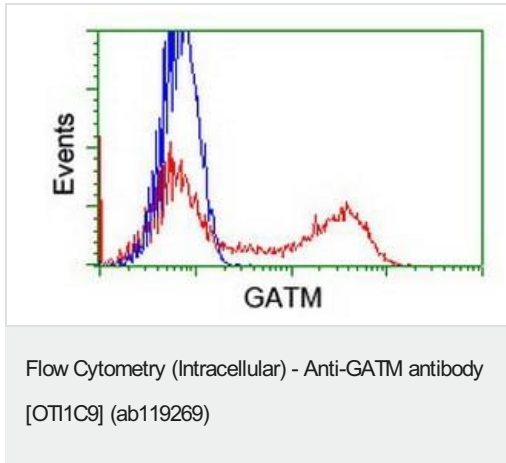
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GATM antibody [OT11C9] (ab119269)

Paraffin-embedded human pancreas tissue stained for GATM using ab119269 at 1/100 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-GATM antibody [OT11C9] (ab119269)

COS-7 (African green monkey kidney fibroblast-like cell line) cells transiently transfected with pCMV6-ENTRY GATM, stained for GATM (Green) using ab119269 at 1/100 dilution in ICC/IF.



Flow cytometric analysis of HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cells transfected with GATM (Red), or an empty vector control plasmid (Blue), stained with ab119269 at 1/100 dilution.

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