

Rabbit GABARAP Polyclonal Antibody | anti-GABARAP antibody

Anti-GABARAP Antibody

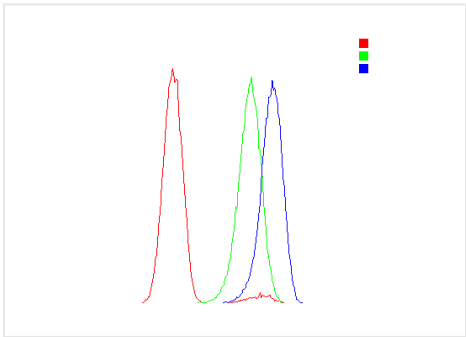
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19250	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

GABARAP; Polyclonal Antibody; Anti-GABARAP Antibody; Gabarapl2; Gef2; Gamma-aminobutyric acid receptor-associated protein-like 2; GABA(A receptor-associated protein-like 2; Ganglioside expression factor 2; GEF-2; Golgi-associated ATPase enhancer of 16 kDa; GATE-16; GABA type A receptor-associated protein; anti-GABARAP antibody

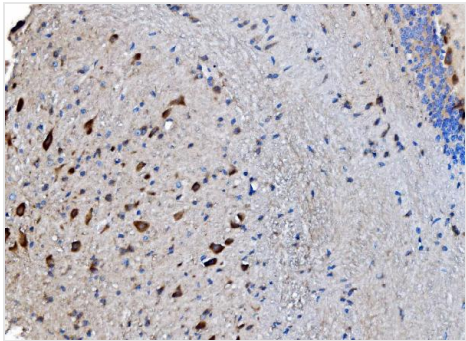
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for GABARAP detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.005mg NaN3.
Applicable Applications for anti-GABARAP antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry)
Application Notes	WB: 0.1-0.25ug/ml Human, Mouse, Rat IHC-P: 2-5ug/ml Human, Mouse, Rat FC/FACS/FCM: 1-3ug/1x106 cells Human, Mouse
Immunogen	A synthetic peptide corresponding to a sequence of human GABARAP (MKFVYKEEHPFEKRRSE).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



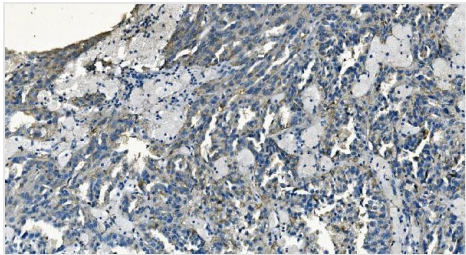
FCM (Flow Cytometry)

Figure 8. Flow Cytometry analysis of U251 cells using anti-GABARAP antibody (AAA19250).Overlay histogram showing U251 cells stained with AAA19250 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GABARAP Antibody (AAA19250, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



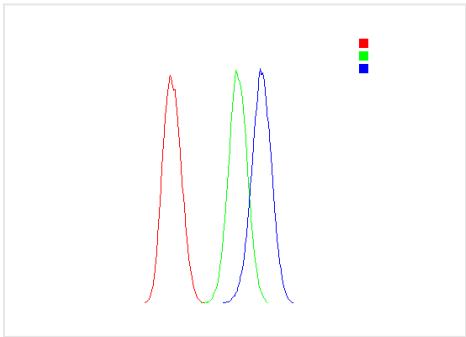
IHC (Immunohistochemistry)

Figure 6. IHC analysis of GABARAP using anti-GABARAP antibody (AAA19250).GABARAP was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-GABARAP Antibody (AAA19250) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



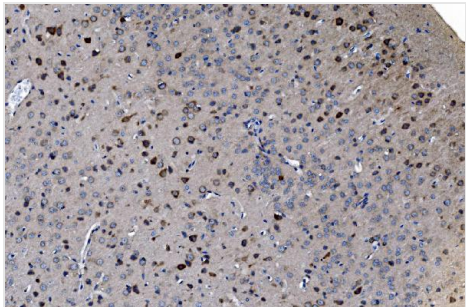
IHC (Immunohistochemistry)

Figure 4. IHC analysis of GABARAP using anti-GABARAP antibody (AAA19250).GABARAP was detected in paraffin-embedded section of human renal carcinomar tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-GABARAP Antibody (AAA19250) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



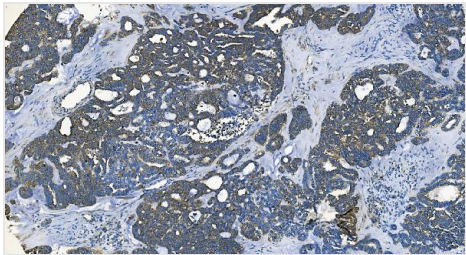
FCM (Flow Cytometry)

Figure 7. Flow Cytometry analysis of HEPA1-6 cells using anti-GABARAP antibody (AAA19250).Overlay histogram showing HEPA1-6 cells stained with AAA19250 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GABARAP Antibody (AAA19250, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 5. IHC analysis of GABARAP using anti-GABARAP antibody (AAA19250).GABARAP was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-GABARAP Antibody (AAA19250) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 3. IHC analysis of GABARAP using anti-GABARAP antibody (AAA19250).GABARAP was detected in paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-GABARAP Antibody (AAA19250) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).

ADDITIONAL INFORMATION

Related Product Information for anti-GABARAP antibody	Gamma-aminobutyric acid receptor-associated protein is a protein that in humans is encoded by the GABARAP gene. Gamma-aminobutyric acid A receptors [GABA(A) receptors] are ligand-gated chloride channels that mediate inhibitory neurotransmission. This gene encodes GABA(A) receptor-associated protein, which is highly positively charged in its N-terminus and shares sequence similarity with light chain-3 of microtubule-associated proteins 1A and 1B. This protein clusters neurotransmitter receptors by mediating interaction with the cytoskeleton.
References	1. Behrends, C., Sowa, M. E., Gygi, S. P., Harper, J. W. Network organization of the human autophagy system. Nature 466: 68-76, 2010 2. Hemelaar, J., Lelyveld, V. S., Kessler, B. M., Ploegh, H. L. A single protease, Apg4B, is specific for the autophagy-related ubiquitin-like proteins GATE-16, MAP1-LC3, GABARAP, and Apg8L. J. Biol. Chem. 278: 51841-51850, 2003. 3. Komoike, Y., Shimojima, K., Liang, J. -S., Fujii, H., Maegaki, Y., Osawa, M., Fujii, S., Higashinakagawa, T., Yamamoto, T. A functional analysis of GABARAP on 17p13. 1 by knockdown zebrafish. J. Hum. Genet. 55: 155-162, 2010.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6005764
NCBI GeneID	11337
NCBI Accession #	NP_009209.1
NCBI GenBank Nucleotide #	NM_007278.1
UniProt Accession #	O95166
Molecular Weight	13,918 Da
NCBI Official Full Name	gamma-aminobutyric acid receptor-associated protein
NCBI Official Synonym Full Names	GABA(A) receptor-associated protein
NCBI Official Symbol	GABARAP
NCBI Official Synonym Symbols	MM46; ATG8A; GABARAP-a
NCBI Protein Information	gamma-aminobutyric acid receptor-associated protein
UniProt Protein Name	Gamma-aminobutyric acid receptor-associated protein
UniProt Gene Name	GABARAP
UniProt Synonym Gene Names	FLC3B
UniProt Entry Name	GBRAP_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.