Datasheet for ABIN3042363

anti-MGMT antibody (AA 2-207)

3 Images

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Overview

Quantity:	100 µg
Target:	MGMT
Binding Specificity:	AA 2-207
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MGMT antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-MGMT Antibody Picoband®
Immunogen:	E.coli-derived human MGMT recombinant protein (Position: D2-N207). Human MGMT shares 70% and 69% amino acid (aa) sequence identity with mouse and rat MGMT, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-MGMT Antibody Picoband® (ABIN3042363). Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification:	Immunogen affinity purified.

Target Details

Target:	MGMT
Alternative Name:	MGMT (MGMT Products)
Background:	Synonyms: Methylated-DNA--protein-cysteine methyltransferase,2.1.1.63,6-O-methylguanine-DNA methyltransferase,MGMT,O-6-methylguanine-DNA-alkyltransferase,MGMT, Tissue Specificity: Ubiquitous, expressed at low level. Highly expressed in heart and kidney. . Background: O6-alkylguanine DNA alkyltransferase (also known as AGT, MGMT or AGAT) is a protein that in humans is encoded by the O6-methylguanine DNA methyltransferase (MGMT) gene. MGMT is mapped to 10q26.3. This gene is crucial for genome stability. It repairs the naturally occurring mutagenic DNA lesion O6-methylguanine back to guanine and prevents mismatch and errors during DNA replication and transcription. It has been found that methylation of the MGMT promoter in the tumor was associated with longer survival. Sequence Similarities: Belongs to the TRAFAC class dynamin-like GTPase superfamily. Dynamin/Fzo/YdjA family. Mitofusin subfamily.
Molecular Weight:	22 kDa
Gene ID:	4255
UniProt:	P16455
Pathways:	DNA Damage Repair, Positive Regulation of Response to DNA Damage Stimulus

Application Details

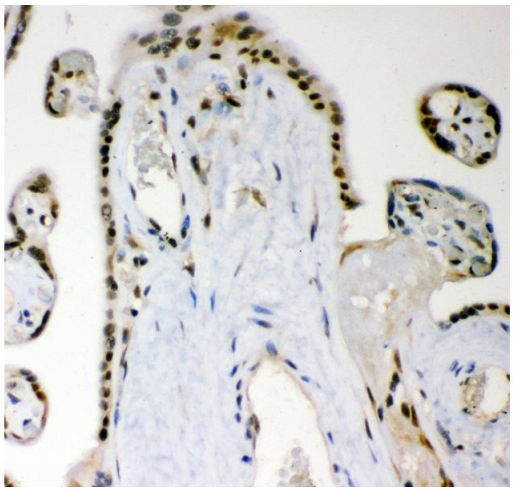
Application Notes:	Western blot, 0.1-0.5 µg/mL, Human Immunohistochemistry (Paraffin-embedded Section), 2-5 µg/mL, Human Immunocytochemistry , 0.5-1 µg/mL, Human Immunocytochemistry/Immunofluorescence, 2 µg/mL, Human Flow Cytometry (Fixed), 1-3 µg/1x10^6 cells, Human 1. Hegi, M. E., Diserens, A.-C., Godard, S., Dietrich, P.-Y., Regli, L., Ostermann, S., Otten, P., Van Melle, G., de Tribolet, N., Stupp, R. Clinical trial substantiates the predictive value of O-6-methylguanine-DNA methyltransferase promoter methylation in glioblastoma patients treated with temozolomide. Clin. Cancer Res. 10: 1871-1874, 2004. 2. Natarajan AT, Vermeulen S, Darroudi F, Valentine MB, Brent TP, Mitra S, Tano K (January 1992). "Chromosomal localization of human O6-methylguanine-DNA methyltransferase (MGMT) gene by in situ hybridization".

Application Details

	Mutagenesis 7 (1): 83-5. 3. Shiraishi A, Sakumi K, Sekiguchi M (October 2000). "Increased susceptibility to chemotherapeutic alkylating agents of mice deficient in DNA repair methyltransferase". Carcinogenesis 21 (10): 1879-1883.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P) and ICC.
Restrictions:	For Research Use only

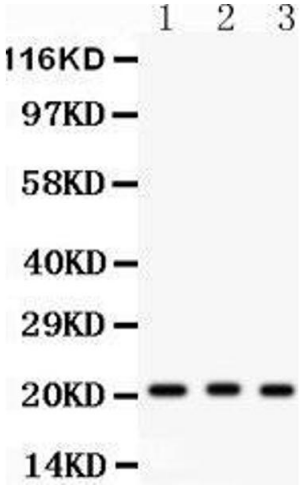
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.01 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.



Immunohistochemistry

Image 1. Anti- MGMT Picoband antibody, IHC(P) IHC(P): Human Placenta Tissue



Western Blotting

Image 2. Anti- MGMT Picoband antibody, Western blotting All lanes: Anti MGMT at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: Human Placenta Tissue Lysate at 50ug Lane 3: JURKAT Whole Cell Lysate at 40ug Predicted bind size: 21KD Observed bind size: 21KD

Western Blotting

Image 3. Anti- MGMT Picoband antibody, Western blotting All lanes: Anti MGMT at 0.5ug/ml WB: Recombinant Human MGMT Protein 0.5ng Predicted bind size: 21KD Observed bind size: 21KD