

Mouse Anti-GSDME (Gasdermin E)/DFNA5/ICERE-1 [G9]: MC0632, MC0632RTU7

Intended Use: For Research Use Only

Description: GSDME (Gasdermin E), known as DFNA5 (deafness, autosomal dominant 5) or ICERE-1, is a 496 amino acid protein encoded by this gene located at 7p15.3. It is expressed in cochlea tissue, placenta, brain, heart, liver, lung and pancreas as two alternatively spliced isoforms, designated short and long. Defects in this gene are the cause of nonsyndromic sensorineural deafness autosomal dominant type 5 (DFNA5), a form of sensorineural hearing loss that results from damage to one of various structures that receive sound information in the brain. Defects in some of the genes localized to chromosome 7 have been linked to Osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome. Some studies found that GSDME is epigenetically inactivated in gastric, colorectal and breast cancer which is in line with its apoptosis-inducing properties. If apoptosis is an intrinsic feature of GSDME, shutting the gene down in tumor cells makes them more susceptible to uncontrolled cellular growth. Moreover, the fact that GSDME is regulated by P53 strongly suggests that GSDME is a tumor suppressor gene.

Specifications:

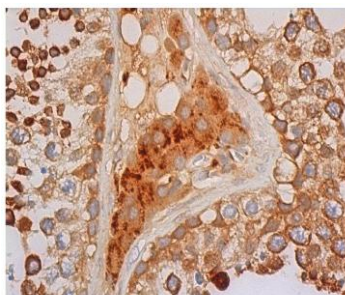
Clone: G9
 Source: Mouse
 Isotype: IgG2a/k
 Reactivity: Human, mouse, rat
 Immunogen: Peptide aa 221-496 at the C-terminus of human GSDME
 Localization: Cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, IF, IP, WB
 Package:

Description	Catalog No.	Size
GSDME (Gasdermin E)/DFNA5/ICERE-1 [G9] Concentrated	MC0632	1 ml
GSDME (Gasdermin E)/DFNA5/ICERE-1 [G9] Prediluted	MC0632RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Placenta, small intestine, testis
 Concentrated Dilution: 25-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human testis stained with anti-GSDME using DAB

References:

1. Methylation of the DFNA5 increases risk of lymph node metastasis in human breast cancer. Kim, MS., et al. *Biochem Biophys Res Commun.* 370: 38-43, 2008. PMID: 18346456.
2. Aberrant promoter methylation and tumor suppressive activity of the DFNA5 gene in colorectal carcinoma. Kim, MS., et al. *Oncogene.* 27: 3624-34, 2008. PMID: 18223688.
3. The potential role of DFNA5, a hearing impairment gene, in p53-mediated cellular response to DNA damage. Masuda, Y., et al. *J Hum Genet.* 51: 652-664, 2006. PMID: 16897187.

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