

Mouse Anti-Heat Shock Protein 70 Member 9 (HSPA9)/GRP75/MOT2 [D9]: MC0449, MC0449RTU7

Intended Use: For Research Use Only

Description: The Heat Shock Protein 70 family comprises four highly conserved proteins, HSP70, HSC70, HSPA9 (GRP75) and HSPA5 (GRP78), which serve a variety of roles. HSC70, HSPA9 and HSPA5 are constitutively expressed in primate cells. HSP 70 expression is strongly induced in response to heat stress. HSPA9 and HSPA5 are unresponsive to heat stress and are induced by glucose deprivation. HSPA9 expression is restricted to the mitochondrial matrix and aids in the translocation and folding of nascent polypeptide chains of both nuclear and mitochondrial origin. Studies show the overexpression of HSPA9 in multiple breast cancer carcinoma and downregulation of HSPA9 using shRNA or inhibition using MKT-077 significantly inhibited cancer cell proliferation and migration. With breast cancer being the most commonly diagnosed malignancy among females, researchers must continue to focus on potential targets and discover the mechanisms that contribute to breast cancer cell proliferation and metastasis. HSPA9 may be useful for breast cancer prognosis.

Specifications

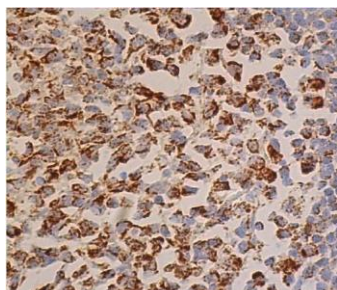
Clone: D9
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human, mouse, rat
 Immunogen: Human HSPA9 aa 525-679
 Localization: Cytoplasm
 Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, IF, IP, WB
 Package:

Description	Catalog No.	Size
Heat Shock Protein 70 Family 9 (HSPA9)/GRP75/MOT2 Concentrated	MC0449	1 ml
Heat Shock Protein 70 Family 9 (HSPA9)/GRP75/MOT2 Prediluted	MC0449RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Liver, kidney, tonsil, testis
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using 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 tonsil stained with anti-HSPA9B using DAB

References:

1. Parvalbumin affects skeletal muscle trophism through modulation of mitochondrial calcium uptake. Gaia Butera, et al. Cell Rep. May 4;35(5):109087, 2021.
2. Enteral delivery of proteins enhances the expression of proteins involved in the cytoskeleton and protein biosynthesis in human duodenal mucosa. Alexis Goichon, et al. Am J Clin Nutr. Aug;102(2):359-67, 2015.