

**Mouse Anti-Myostatin/GDF8 [MD421]: MC0309-0.1ML**

**Intended Use:** For Research Use Only

**Description:** Myostatin (also known as growth differentiation factor 8, or GDF-8) is a secreted protein that acts as a negative regulator of skeletal muscle mass. Essentially, it acts as a molecular "brake" or biological governor, signaling muscle cells to stop growing or multiplying to prevent muscles from becoming too large. This group of proteins is characterized by a polybasic proteolytic processing site which is cleaved to produce a mature protein containing seven conserved cysteine residues. The members of this family are regulators of cell growth and differentiation in both embryonic and adult tissues.

**Specifications:**

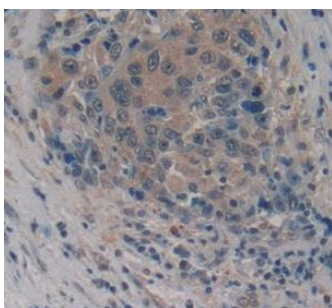
|               |                                                                                          |
|---------------|------------------------------------------------------------------------------------------|
| Clone:        | MD421                                                                                    |
| Source:       | Mouse                                                                                    |
| Isotype:      | IgG                                                                                      |
| Reactivity:   | Human                                                                                    |
| Immunogen:    | Recombinant Myostatin protein                                                            |
| Localization: | Cytoplasm                                                                                |
| Formulation:  | Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN <sub>3</sub> ) |
| Storage:      | Store at 2°- 8°C                                                                         |
| Applications: | IHC, ICC/IF, WB                                                                          |
| Package:      |                                                                                          |

| Description                         | Catalog No.  | Size   |
|-------------------------------------|--------------|--------|
| Myostatin/GDF8 [MD421] Concentrated | MC0309-0.1ML | 0.1 ml |

**IHC Procedure\*:**

|                           |                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------|
| Positive Control Tissue:  | Liver cancer, cervical cancer                                                       |
| Concentrated Dilution:    | 20-200                                                                              |
| 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 liver cancer stained with anti-Myostatin using DAB

**References:**

1. Pharmacologic Inhibition of Myostatin With a Myostatin Antibody Improves the Skeletal Muscle and Bone Phenotype of Male Insulin-Deficient Diabetic Mice . R Clay Bunn, et al. JBMR Plus, Volume 7, Issue 11, November 2023.
2. Novel myostatin-specific antibody enhances muscle strength in muscle disease models. Hiroyasu Muramatsu, et el. Sci Rep. Jan 25;11:2160. doi: 10.1038/s41598-021-81669-8, 2021.
3. Production of a monoclonal anti-myostatin antibody and the effects of in ovo administration of the antibody on posthatch broiler growth and muscle mass. Y S Kim, et al. Poult Sci. Jun;85(6):1062-71, 2006. doi: 10.1093/ps/85.6.1062.