

**Mouse Anti-Activin A/Inhibin Beta A [H9]: MC0484, MC0484RTU7**

**Intended Use:** For Research Use Only

**Description:** Activin and Inhibin are members of the TGF-beta superfamily of cytokines and are involved in a wide range of biological processes including tissue morphogenesis and repair, fibrosis, inflammation, neural development, hematopoiesis, reproductive system function, and carcinogenesis. Activins are nonglycosylated homodimers or heterodimers of various beta subunits (beta A, beta B, beta C, and beta E in mammals), while Inhibins are heterodimers of a unique alpha subunit and one of the beta subunits. Activin A is a widely expressed homodimer of two beta A chains. Activin A exerts its biological activities by binding to the type 2 serine/threonine kinase Activin RIIA which then noncovalently associates with the type 1 serine/threonine kinase Activin RIB/ALK-4. Signaling through this receptor complex leads to Smad activation and regulation of activin-responsive gene transcription. The bioactivity of Activin A is regulated by a variety of mechanisms. BAMBI, Betaglycan, and Cripto are cell-associated molecules that function as decoy receptors or limit the ability of Activin A to induce receptor complex assembly. The intracellular formation of Activin A can be prevented by the incorporation of the beta A subunit into Activin AC or Inhibin A.

**Specifications:**

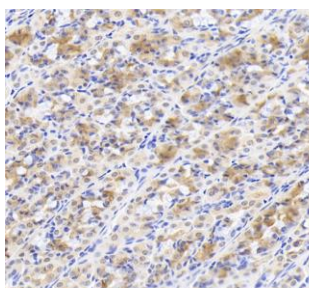
Clone: H9  
 Source: Mouse  
 Isotype: IgG1k  
 Reactivity: Human, pig  
 Immunogen: Recombinant Activin A Gly311~Ser426 expressed in E Coli  
 Localization: Secreted  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ICC/IF, IP, WB  
 Package:

Description	Catalog No.	Size
Activin A/Inhibin Beta A Concentrated	MC0484	1 ml
Activin A/Inhibin Beta A Prediluted	MC0484RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Liver, spleen, lung cancer  
 Concentrated Dilution: 10-100  
 Pretreatment: Tris EDTA pH9.0 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C  
 Incubation Time and Temp: Overnight @ 4°C  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE pig stomach stained with anti-Activin A using DAB

**References:**

1. A Protumorigenic mDia2-MIRO1 Axis Controls Mitochondrial Positioning and Function in Cancer-Associated Fibroblasts. Michael Cangkrama, et al. Cancer Res. Oct 17;82(20):3701-3717, 2022.
2. Cripto is a noncompetitive activin antagonist that forms analogous signaling complexes with activin and nodal. Kelber JA, et al. J Biol Chem 283: 4490-4500, 2008.

Doc. 100-MC0484  
Rev. A