



## MUSK Mouse Monoclonal Antibody

E10-20347

**Background:** MuSK (for Muscle Specific Kinase) is a receptor tyrosine kinase required for the formation of the neuromuscular junction (NMJ). It induces cellular signaling by causing the addition of phosphate molecules to particular tyrosines on itself, and on proteins which bind the cytoplasmic domain of the receptor. It is activated by a nerve-derived proteoglycan called agrin. During development, the growing end of motor neuron axons secrete a protein called agrin. This protein binds to several receptors on the surface of skeletal muscle. The receptor which seems to be required for formation of the neuromuscular junction (NMJ), which comprises the nerve-muscle synapse is called MuSK. MUSK mutations lead to decreased agrin-dependent AchR aggregation, a critical step in the formation of the neuromuscular junction.

**Catalog Number:** E10-20347

**Amount:** 100µg/100µl

**Clone Number:** 10A4

**Species:** Mouse IgG1

**MW:** 97kDa

**Aliases:** muscle, skeletal, receptor tyrosine kinase

**Entrez Gene:** 4593

**Immunogen:** Purified recombinant extracellular fragment of human MUSK (aa24-209) fused with hlgGFc tag expressed in HEK293 cell line.

**Storage:** Store at 4 °C for long term storage, store at 20 °C for short term storage.

**Formulation:** Ascitic fluid containing 0.03% sodium azide.

**Species Reactivities:** Human

**Tested Applications:** IHC,IF,ELISA. Not yet tested in other applications. Determining optimal working dilutions by titration test.

**Application notes:** IHC. 1/200 - 1/1000. IF. 1/200 - 1/1000. ELISA. Propose dilution 1/10000.

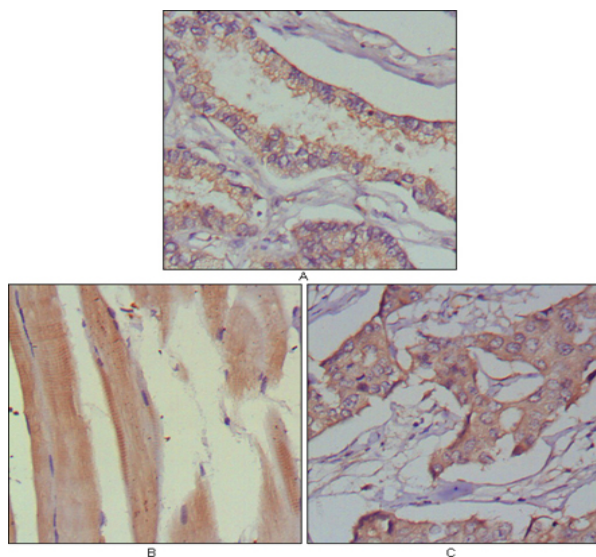


Figure 1. Immunohistochemical analysis of paraffin-embedded human lung cancer (A), muscles (B) and breast cancer (C) using MUSK mouse mAb with DAB staining.

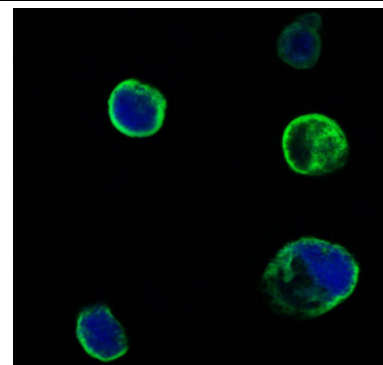


Figure 2. Confocal immunofluorescence analysis of HEK293 cells transfected with extracellular MUSK (aa24-209)-hlgGFc using MUSK mouse mAb (green). Blue. DRAQ5 fluorescent DNA dye.

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