

## **DDR2 Mouse Monoclonal Antibody**

Background:

DDR2 (discoidin domain receptor family, member 2) is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/ threonine (STK) kinase catalytic domains. Receptor tyrosine kinases (RTKs) play a key role in the communication of cells with their microenvironment. These molecules are involved in the regulation of cell growth, differentiation, and metabolism. In several cases the biochemical mechanism by which RTKs transduce signals across the membrane has been shown to be ligand induced receptor oligomerization and subsequent intracellular phosphorylation. This autophosphorylation leads to phosphorylation of cytosolic targets as well as association with other molecules, which are involved in pleiotropic effects of signal transduction. RTKs have a tripartite structure with extracellular, transmembrane, and cytoplasmic regions. This gene encodes a member of a novel subclass of RTKs and contains a distinct extracellular region encompassing a factor VIII-like domain. Alternative splicing in the 5' UTR results in multiple transcript variants encoding the same protein.

Catalog Number: E10-20151

**Amount:** 100μg/100μl

Clone Number: 3B11E4

Species: Mouse IgG2a

Aliases: TKT; MIG20a; NTRKR3; TYRO10

Entrez Gene: 4921

Immunogen: Purified recombinant fragment of human DDR2 expressed in E. Coli.

Storage: Store at 4 °20 for Cong term storage, store at

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

Species Reactivities: Human

Tested Applications: WB, IHC,IF,ELISA. Not yet tested in other applications. Determining optimal working

dilutions by titration test.

Application notes: WB:1/500 - 1/2000,IHC:1/200 - 1/1000,IF:1/200 - 1/1000, ELISA: Propose dilution 1/10000.

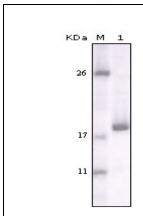


Figure 1: Western blot analysis using DDR2 mouse mAb against truncated DDR2 recombinant protein.

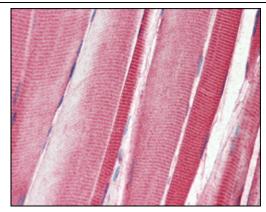


Figure 2: Immunohistochemical analysis of paraffin-embedded human skeletal musle tissues using DDR2 mouse mAb.

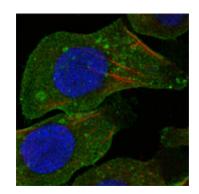


Figure 3: Confocal immunofluorescence analysis of A549 cells using DDR2 mouse mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.