Anti-DDR2 Antibody [A9H5]

HA601150

Product Type:	Mouse monoclonal IgG2b, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB
Molecular Wt:	Predicted band size: 97 kDa
Clone number:	A9H5

Description: Discoidin domain-containing receptor 2, also known as CD167b (cluster of differentiation 167b), is a protein that in humans is encoded by the DDR2 gene. Discoidin domain-containing receptor 2 is a receptor tyrosine kinase (RTK). 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. In the case of DDR2, the ligand is collagen which binds to its extracellular discoidin domain. This autophosphorylation leads to phosphorylation of cytosolic targets as well as association with other molecules, which are involved in pleiotropic effects of signal transduction. DDR2 has been associated with a number of diseases including fibrosis and cancer. 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.

Immunogen: Recombinant protein within human DDR2 aa 22-200 / 855.

Positive control: HUVEC cell lysate, U-87 MG cell lysate, C2C12 cell lysate, HeLa cell lysate.

Subcellular location: Cell membrane.

Database links: SwissProt: Q16832 Human | Q62371 Mouse

Recommended Dilutions:

WB 1:1,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

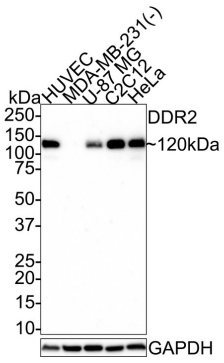

Fig1: Western blot analysis of DDR2 on different lysates with Mouse anti-DDR2 antibody (HA601150) at 1/1,000 dilution.

Lane 1: HUVEC cell lysate
Lane 2: MDA-MB-231 cell lysate (negative)
Lane 3: U-87 MG cell lysate
Lane 4: C2C12 cell lysate
Lane 5: HeLa cell lysate

Lysates/proteins at 30 µg/Lane.

Predicted band size: 97 kDa
Observed band size: 120 kDa

Exposure time: 1 minute 20 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA601150) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1:100,000 dilution was used for 1 hour at room temperature.

Background References

1. Lin CC et al. DDR2 upregulation confers ferroptosis susceptibility of recurrent breast tumors through the Hippo pathway. Oncogene. 2021 Mar
2. Elkamhawy A et al. The Journey of DDR1 and DDR2 Kinase Inhibitors as Rising Stars in the Fight Against Cancer. Int J Mol Sci. 2021 Ju