

**Bioworld Technology,Inc.** 

# **IGF2** monoclonal antibody

Catalog: MB66160

Host:

Mouse

Reactivity: Human

## **BackGround:**

Insulin-like growth factor 2 (IGF-II, IGF-2) is a peptide growth factor with structural similarity to insulin and insulin-like growth factor 1 (IGF-I). IGF-II is reported to interact with multiple cell-surface receptors, including type 1 insulin-like growth factor receptor (IGF1R), insulin receptor A isoform (IR-A), and the structurally distinct type-2 IGF receptor (IGF2R) . Activation of IGF1R and IR-A by IGF-II promotes cell growth, proliferation, apoptosis, and metabolic signaling ; binding of IGF-II to IGF2R (a.k.a. mannose 6-phosphate receptor) results in IGF-II internalization via receptor-mediated endocytosis, and subsequent transport to the lysosome for degradation . Serum IGF-II is generally found in complex with insulin-like growth factor binding proteins (IGFBPs), to which it binds with high affinity; this interaction functions to prolong the half-life of IGF-II in circulation . IGF-II plays a particularly crucial role in promoting embryonic fetal growth and development ; in rodents, many of these functions are displaced by IGF-I during normal postnatal development, whereas in humans, IGF-II expression is more widely maintained . Binding of IGF-II to both IGF1R and IR-A has been shown to promote cancer progression, primarily through promoting cell proliferation and survival. Small molecules designed to block IGF-II activity are thus being pursued as therapeutic strategies for cancer treatment .

### **Product:**

Mouse IgG2b. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.

## **Molecular Weight:**

~ 20 kDa

**Swiss-Prot:** 

#### **Purification&Purity:**

The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

**Applications:** 

IHC (1/100 - 1/300)

Storage&Stability:

Store at  $4 \,^{\circ}{\rm C}$  short term. Aliquot and store at  $-20 \,^{\circ}{\rm C}$  long term. Avoid freeze-thaw cycles.

#### **Specificity:**

Recognizes endogenous levels of IGF2 protein. **DATA:** 



Immunohistochemical analysis of IGF2 staining in human pancreatic carcinoma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### Note:

For research use only, not for use in diagnostic procedure.

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