IGF-IRβ (D-11): sc-398250

**BACKGROUND**

Receptor tyrosine kinases (RTKs) are transmembrane molecular scaffolds that influence cellular processes including the cell cycle, cell migration, cell metabolism, cell survival, proliferation and differentiation. Insulin-like growth factor-I receptor (IGF-IR) is an RTK that stimulates growth in many different cell types, blocks apoptosis, acts as an intermediate of many growth hormone responses and may stimulate the growth of some types of cancer. The IGF-IR cognate ligand insulin-like growth factor-I (IGF-I) promotes growth hormone responses and may stimulate the growth of some types of cancer. The IGF-IR cognate ligand insulin-like growth factor-I (IGF-I) promotes association of IGF-IR with Shc, GRB2 and Sos 1, which initiates Ras and ERK activation of the Elk transcription factors. The modular phosphotyrosine binding (PTB) domains of Insulin receptor substrate (IRS)-1 and -2 can associate with the active IGF-IR and initiate phosphatidylinositol 3-kinase-dependent downstream signals. The human IGF-IR gene maps to chromosome 15q26.3 and encodes a 2,491 amino acid transmembrane protein.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: IGF1R (human) mapping to 15q26.3; Igf1r (mouse) mapping to 7 D1.

**SOURCE**

IGF-IRβ (D-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1333-1366 at the C-terminus of IGF-IRβ of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-398250 P, [100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein].

**APPLICATIONS**

IGF-IRβ (D-11) is recommended for detection of IGF-IRβ of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IGF-IRβ (D-11) is also recommended for detection of IGF-IRβ in additional species, including equine, canine, bovine, porcine and avian.


Molecular Weight of pro-IGF-IR: 200 kDa.

Molecular Weight of IGF-IRα subunit: 130 kDa.

Molecular Weight of IGF-IRβ subunit: 97 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, RPMI2650 whole cell lysate: sc-364192 or A-431 whole cell lysate: sc-2201.

**DATA**

IGF-IRβ (D-11) sc-398250. Western blot analysis of IGF-IRβ expression in HeLa (A), NCI-H295 (B) and RPMI2650 (C) whole cell lysates.

IGF-IRβ (D-11) sc-398250. Western blot analysis of IGF-IRβ expression in HeLa (A) and A-431 (B) whole cell lysates.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

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

See IGF-IRβ (F-1): sc-390130 for IGF-IRβ antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.