

**Mouse Anti-IGF-I Receptor/ IGF1R [3C8B1]: MC0418**

**Intended Use:** For Research Use Only

**Description:** Type I insulin-like growth factor receptor (IGFIR) is a transmembrane receptor tyrosine kinase that is widely expressed in many cell lines and cell types within fetal and postnatal tissues. Receptor autophosphorylation follows binding of the IGF-I and IGF-II ligands. Three tyrosine residues within the kinase domain (Tyr1131, Tyr1135, and Tyr1136) are the earliest major autophosphorylation sites. Phosphorylation of these three tyrosine residues is necessary for kinase activation. Insulin receptors (IRs) share significant structural and functional similarity with IGF-I receptors, including the presence of an equivalent tyrosine cluster (Tyr1146/1150/1151) within the kinase domain activation loop. Tyrosine autophosphorylation of IRs is one of the earliest cellular responses to insulin stimulation. Autophosphorylation begins with phosphorylation at Tyr1146 and either Tyr1150 or Tyr1151, while full kinase activation requires triple tyrosine phosphorylation.

**Specifications:**

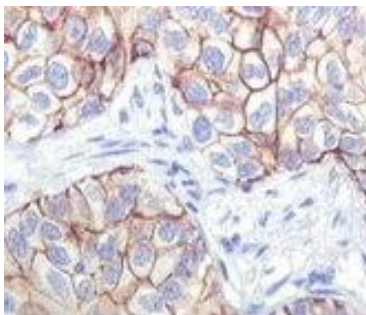
Clone: 3C8B1  
 Source: Mouse  
 Isotype: IgG2b  
 Reactivity: Human  
 Immunogen: Purified recombinant fragment of IGFIR expressed in E. Coli  
 Localization: Membrane  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, WB  
 Package:

Description	Catalog No.	Size
IGF-I Receptor β/ IGF1R Concentrated	MC0418	1 ml

**IHC Procedure\*:**

Positive Control Tissue: Breast cancer  
 Concentrated Dilution: 20-100  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 min @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human gastric adenocarcinoma stained with anti-IGF1R using DAB

**References:**

1. Characterization of proliferative effects of insulin, insulin analogues and insulin-like growth factor-1 (IGF-1) in human lung fibroblasts. M Warnkena, et al., Naunyn Schmiedebergs Arch Pharmacol. Dec;382(5-6):511-24, 2010.
2. Insulin receptor substrate-2 mediated insulin-like growth factor-I receptor overexpression in pancreatic adenocarcinoma through protein kinase Cdelta. Junhye Kwon, et al., Cancer Res. Feb 15;69(4):1350-7, 2009.
3. Pancreatic glucokinase is activated by insulin-like growth factor-I. Kazuya Yoshida, et al., Endocrinology. Jun;148(6):2904-13, 2007.

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Rev. A