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Anti-Human CD221 (Insulin-like Growth Factor-1 Receptor) Functional Grade Purified
Catalog Number: 16-8849
Also Known As: IGF-1R
RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Human CD221 (Insulin-like Growth Factor-1 Receptor) Functional Grade Purified

REF **Catalog Number:** 16-8849

Clone: 1H7

Concentration: 1 mg/mL

Host/Isotype: Mouse IgG1, kappa

Handling Conditions: Use in sterile environment.

Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide

Temperature Limitation: Store at 2-8°C.

LOT **Batch Code:** Refer to Vial

Use By: Refer to Vial

Description

This 1H7 monoclonal antibody reacts with human insulin-like growth factor-1 receptor (IGF-1R), also known as CD221. This receptor is a cell surface-expressed glycoprotein composed of two extracellular alpha subunits and two transmembrane beta subunits that possess tyrosine kinase activity. Expressed on nearly all cell types, this receptor binds IGF-I and IGF-II, as well as insulin. Ligand binding leads to activation of the PI3K/Akt and MAPK pathways, which mediate cell proliferation and survival. Many tumors and transformed cells display altered IGF-1R expression.

This monoclonal antibody has been reported to block binding of IGF-I and IGF-II to the IGF-1R.

Applications Reported

This 1H7 antibody has been reported for use in functional assays.

Applications Tested

This 1H7 antibody has been tested by flow cytometric analysis of the HeLa cell line. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Chitnis MM, Yuen JS, Protheroe AS, Pollak M, Macaulay VM. The type 1 insulin-like growth factor receptor pathway. Clin Cancer Res. 2008 Oct 15;14(20):6364-70. Review.

Li SL, Kato J, Paz IB, Kasuya J, Fujita-Yamaguchi Y. Two new monoclonal antibodies against the alpha subunit of the human insulin-like growth factor-I receptor. Biochem Biophys Res Commun. 1993 Oct 15;196(1):92-8. (1H7, WB)

Reiss K, Porcu P, Sell C, Pietrzkowski Z, Baserga R. The insulin-like growth factor 1 receptor is required for the proliferation of hemopoietic cells. Oncogene. 1992 Nov;7(11):2243-8.

Related Products

16-4714 Mouse IgG1 K Isotype Control Functional Grade Purified (P3.6.2.1)