Technical Data Sheet

Purified Mouse Anti-Human CD221

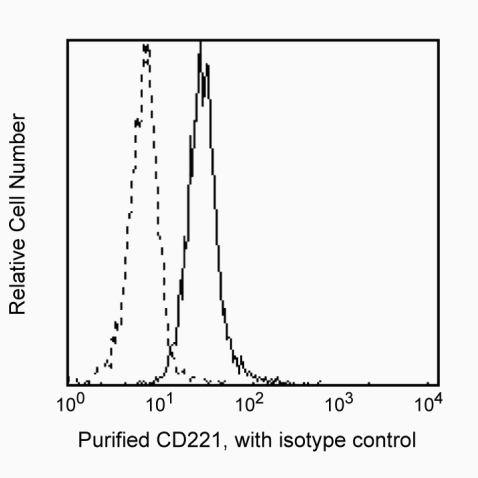
Product Information

Material Number:	**555998**
Alternate Name:	IGF-I Receptor α
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	1H7
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Reacts with human insulin-like growth factor-I (IGF-I) receptor α subunit (135 kDa). IGF-IRα is a glycoprotein complex composed of two extracellular α subunits and two transmembrane β subunits. The transmembrane subunits play a role in tyrosine phosphorylation of several intracellular signaling proteins. IGF-IRα is structurally and functionally similar to insulin receptor and is expressed on a variety of human hematopoietic and non-hematopoietic cells. It mediates the effects of IGF-I and IGF-II on cellular growth. 1H7 does not cross react with human insulin receptor and it can block IGF-I or IGF-II stimulated cell growth.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Profile of peripheral blood granulocytes analyzed on a FACScan (BDIS, San Jose, CA)

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4° C.

Application Notes

Application

Flow cytometry	Routinely Tested
Fluorescence microscopy	Reported

Recommended Assay Procedure:
Note: this product is routinely tested on peripheral blood granulocytes. The histogram is an example of the expected reactivity.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
555746	Purified Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Kooijman RK, Scholtens LE, Rijkers GT, Zegers BJ. Differential expression of type I insulin-like growth factor receptors in different stages of human T cells. *Eur J Immunol.* 1995; 25(4):931-935.(Biology)

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; 196(1):92-98.(Biology)

Xiong L, Kasuya J, Li SL, Kato J, Fujita-Yamaguchi Y. Growth-stimulatory monoclonal antibodies against human insulin-like growth factor I receptor. *Proc Natl Acad Sci U S A.* 1992; 89(12):5356-5360.(Biology)