

## CD221 IGF-1 Receptor clone 1H7

### Instructions for Use

**Specification:**

IGF-1 Receptor recognizes human CD221, a 155kD receptor tyrosine kinase, also known as Insulin-like growth factor I receptor (IGF-I Receptor). CD221 is composed of two extracellular alpha-subunits and two transmembrane beta-subunits. Clone 1H7 recognizes an epitope in the alpha subunits of CD221, demonstrated by Western blotting (1). CD221 is expressed in a range of tissues, including kidney, liver, placenta, mammary gland, brain, ovary and skin. The ligands for CD221 include IGF-I and IGF-II, which bind to CD221 and activate tyrosine kinase activity, resulting in phosphorylation of several intracellular signaling proteins. Clone 1H7 is reported to partially block binding of IGF-I and IGF-II to CD221 (1).

**Availability:**

Catalog NO.	Contents	Volume
ILM2316-C01	CD221 IGF-1 receptor	0,1 ml concentrate
ILM2316-C05	CD221 IGF-1 receptor	0,5 ml concentrate
ILM2316-C1	CD221 IGF-1 receptor	1,0 ml concentrate

**Intended use:** For Research Use Only

**Reactivity:** Human

**Clone:** 1H7

**Species of origin:** Mouse

**Isotype:** IgG

**Control Tissue:** Pancreas, placenta

**Staining:** Membrane

**Immunogen:** Purified human placental CD221 IGF-1 receptor

**Presentation:**

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

**Application and suggested dilutions:**

Pretreatment: protein digestion (Trypsin or Pronase) is required for IHC staining on formalin-fixed, paraffin embedded tissue sections.

- Immunohistochemical staining of formalin-fixed, paraffin embedded tissue section (dilution up to 1:25-1:50)
- Flow Cytometry (dilution up to 1:10)
- Western Blotting

The optimal dilution for a specific application should be determined by the investigator.

**Note:** Dilution of the antibody in 10% normal goat serum followed by a goat anti-mouse secondary antibody-based detection is recommended.

**Storage & Stability:** Store at 2-8 °C. Do not use after expiration date printed on the vial.

**References:**

- 1) Li, S.L. et al. (1993) Two new monoclonal antibodies against the alpha subunit of the human insulin-like growth factor-I receptor. *Biochem. Biophys. Res. Commun.* 196:92-98.
- 2) Beauvais, D.M. and Rapraeger, A.C. (2010) Syndecan-1 couples the insulin-like growth factor-1 receptor to inside-out integrin activation *J Cell Sci.* 2010 Nov 1;123: 3796-807.