

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LILRB5/CD87c/LIR-8 in direct ELISA.
Source	Monoclonal Mouse IgG _{2B} Clone # 1058033
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line, NS0-derived human LILRB5/CD85c/LIR-8 Arg18-His456 Accession # O75023
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunocytochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

LIR8, also known as CD85c and LILRB5, belongs to the Leukocyte immunoglobulin-like receptors (LILR) family of transmembrane glycoproteins involved in regulating immune responses (1,2). There are at least thirteen LILR family members and are divided into activating (LILRA) or inhibiting (LILRB) molecules (1, 2). Mature human LIR8 consists of an extracellular domain (ECD) with four Ig-like domains, a transmembrane segment, and a cytoplasmic domain with two immunoreceptor tyrosine-based inhibitory motifs (ITIM). Alternative splicing of human LIR8 generates at least 2 isoforms, one lacking the second Ig-like domain. The LILR family appears to be primate-specific receptors in terms of sequence homology. LIR8 is expressed on NK cells and in the tryptic granules of mast cells and negatively regulates immune cell activation (3, 4) It is present on the mast cell surface following cell activation and degranulation (4). Activated mast cells may also release soluble forms of LIR8 (3). LIR8 has also been shown to be expressed on T cells and induce CD8+ T cell proliferation (5). Consistent with the demonstrated binding of LILRB2 to Angiotensin-like 2 and 5 (6), R&D Systems in-house testing indicates that LIR8 binds to Angiotensin-like 7. Recently, a common missense variant of LIR8 was found to be associated with statin intolerance and myalgia (7).

PRODUCT SPECIFIC NOTICES

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