

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
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

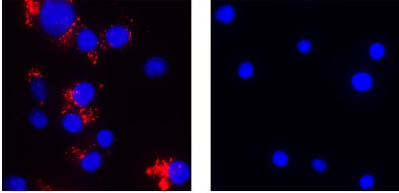
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	Immersion fixed Transfected & Wild Type HEK293 Human Embryonic Kidney Cell Line

DATA

Immunocytochemistry



LILRB5/CD85c/LIR-8 in Transfected & Wild Type HEK293 Human Embryonic Kidney Cell Line.
LILRB5/CD85c/LIR-8 was detected in immersion fixed Transfected & Wild Type HEK293 Human Embryonic Kidney Cell Line using Mouse Anti-Human LILRB5/CD85c/LIR-8 Monoclonal Antibody (Catalog # MAB30651) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to Cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Transfected HEK293 (Positive) cells Wildtype HEK293 (Negative) cells

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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).

References:

1. Brown, D. *et al.* (2004) *Tissue antigens*. **64**:215.
2. Thomas, R. *et al.* (2010) *Clin. Rev. Allergy Immunol.* **38**:159.
3. Borges, L. *et al.* (1997) *J. Immunol.* **159**:5192.
4. Tedla, N. *et al.* (2008) *J. Leukoc. Biol.* **83**:334.
5. Hogan, H. E. *et al.* (2016) *Sci Rep.* **6**:21780.
6. Zheng, J. *et al.* (2012) *Nature* **485**:656.
7. Siddigui, M. *et al.* (2017) *Eur. Heart J.* **38**:3569.