

▶ ILT-5/8 (G-20): sc-47079

BACKGROUND

Leukocyte immunoglobulin-like receptors (ILTs, also known as LIRs) are members of the immunoglobulin superfamily of glycoproteins and are predominantly expressed by monocytes, B cells, dendritic cells, natural killer (NK) cells, peripheral blood leukocytes and tissues such as placenta, lung and liver. There are several members of the ILT family, including ILT-1, ILT-2, ILT-3, ILT-4, ILT-5, ILT-6, ILT-7, ILT-8, ILT-11, LIR-6 and LIR-8. These ILT proteins are divided into two subfamilies, namely subfamily A (ILT-1, ILT-6, ILT-7, ILT-8, ILT-11 and LIR-6) and subfamily B (ILT-2, ILT-3, ILT-4, ILT-5 and LIR-8), the former of which function as stimulating receptors and the latter of which function as inhibitory receptors. Characteristically, members of subfamily A have transmembrane regions containing a charged arginine residue through which they initiate stimulatory cascades, while members of subfamily B contain cytoplasmic immunoreceptor tyrosine-based inhibitory motifs (ITIMs) through which they induce inhibitory signaling cascades.

REFERENCES

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2. Cosman, D., et al. 1997. A novel immunoglobulin superfamily receptor for cellular and viral MHC class I molecules. *Immunity* 7: 273-282.
3. Colonna, M., et al. 1997. A common inhibitory receptor for major histocompatibility complex class I molecules on human lymphoid and myelomonocytic cells. *J. Exp. Med.* 186: 1809-1818.
4. André, P., et al. 2001. New nomenclature for MHC receptors. *Nat. Immunol.* 2: 661.
5. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604811. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Foster, C.E., et al. 2003. Crystal structure of the human natural killer (NK) cell activating receptor NKp46 reveals structural relationship to other leukocyte receptor complex immunoreceptors. *J. Biol. Chem.* 278: 46081-46086.
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CHROMOSOMAL LOCATION

Genetic locus: LILRB3 (human) mapping to 19q13.42, LILRA6 (human) mapping to 19q13.42

SOURCE

ILT-5/8 (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ILT-5 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47079 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

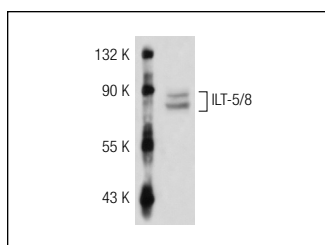
ILT-5/8 (G-20) is recommended for detection of ILT-5 and ILT-8 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with ILT-4.

Molecular Weight of different ILT proteins: 33-71 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



ILT-5/8 (G-20): sc-47079. Western blot analysis of ILT-5/8 expression in NK-92 whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfaction
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Try **ILT (D-6): sc-166549** or **ILT (H-5): sc-515288**, our highly recommended monoclonal alternatives to ILT-5/8 (G-20).