Anti-Human B7-H2 (#19G23)

20150116ML

FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	**101-M225**
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with human recombinant protein of B7-H2 extracellular domain.

Target Background

Synonyms (Target):	ICOSLG; B7H2; GL50; B7-H2; B7RP1; CD275; ICOSL; LICOS; B7RP-1; ICOS-L

Cathepsins of the papain family can be divided into two functional groups. One group comprises ubiquitously expressed, intracellular housekeeping proteases responsible for the general lysosomal protein breakdown. The cathepsins L, B, H, and probably O (1, 2) belong to this group. The other group is characterized by a tissue restricted expression pattern and by the assignment of specific functions correlated with their tissue distribution. For example, cathepsin S, the first known tissue-specific cysteine protease is primarily expressed in lymphatic tissues (3,4) and is responsible for the specific degradation of the invariant chain of MHC class II complexes in antigen-presenting cells (5, 6). Cathepsin K, which is predominantly expressed in osteoclasts, is a major protease in bone resorption (7-9). All presently known thiol-dependent cathepsins share common protein structures with a signal sequence of 16–18 amino acids, followed by a propeptide of 62–100 residues and then a catalytically active mature region of about 220–230 amino acids (1). The propart is involved in the folding of the precursor protein, in the temporary inhibition of the protease in its precursor form, and in transport of the proenzyme to the endosomal/lysosomal compartment using mannose 6-phosphateN-glycosylation sites (10,11). Finally, the mature, catalytically active, enzyme contains the catalytic triad consisting of Cys-25, His-159, and Asn-175 (papain numbering) and is folded into a two-domain structure. In addition, thiol-dependent cathepsins have been characterized as lysosomal enzymes, since they have signal sequences and potential N-glycosylation sites and generally have pH optima in the acidic pH range.

Database References Target

Protein RefSeq:	NP_056074.1
Uniprot ID:	O75144
mRNA RefSeq:	NM_015259.4

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#19G23)
Isotype	IgG2
Purification	Protein G chromatography
Antigen	recombinant human recombinant B7-H2 EC domain
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody was selected for its ability to detect human B7-H2 protein.

AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

The antibody can be used within the following applications:

WB, N

Recommended usage:

WB: 1:500-1000

Neutralization: Yes

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!