

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Mouse                                                                                               |
| <b>Specificity</b>                                                                                                                                                                                      | Detects mouse CD160 in direct ELISAs.                                                               |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Rat IgG <sub>2A</sub> Clone # 342705                                                     |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                                          |
| <b>Immunogen</b>                                                                                                                                                                                        | Mouse myeloma cell line NS0-derived recombinant mouse CD160<br>Gly28-Ser160<br>Accession # AAH21596 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                     |
| <b>Formulation</b>                                                                                                                                                                                      | 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

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

## BACKGROUND

CD160 (also Natural killer cell receptor BY55) is a 16 kDa (predicted) member of the Ig superfamily (1-4). In mouse, it is expressed principally on nonmyeloid hematopoietic cells. These include CD3<sup>+</sup> NK1.1 cells, CD8<sup>+</sup> TEM and TCM T cells, CD8α<sup>+</sup> IELs, NKT cells, CD8-γδ TCR T cells, and vascular endothelial cells (1, 5-7). Mouse CD160 has been identified as a 20-21 kDa GPI-linked glycoprotein (4, 5). It is synthesized as a preproprotein that is 185 amino acids (aa) in length. The precursor contains a 27 aa signal sequence, a 133 aa mature molecule that shows one 98 aa V-type Ig-like domain (aa 28-125), and a 25 aa prosegment that is cleaved to generate a GPI-linkage at Ser160. Mouse GPI-linked CD160 is known to be cleaved by phospholipase C, and this generates a 40 kDa (presumably dimeric) band in SDS-PAGE (5). One alternative splice form for mouse CD160 is reported to show a deletion of aa 137-180. This may generate a soluble molecule (5; GenBank Accession # NP\_001156969). Mature mouse CD160 shares 63% and 88% aa identity with human and rat CD160, respectively. In mouse, CD160 is reported to bind to HVEM/TNFRSF14, and both classical and non-classical MHC Class I molecules (5, 8). MHC-I proteins recognized by CD160 include Dd, Kb, Qa-1b and CD1d (5). Upon engagement, the effects of CD160 ligation appear to be context dependent. When expressed on endothelial cells, CD160 binding to human HLA-G1 initiates apoptosis, and thus impacts angiogenesis (6). When expressed on NK1.1 cells, mouse CD160 ligation alone has no effect; when combined with NK1.1 antigen stimulation, CD160 decreases NK cell IFN-γ secretion. Relative to cytotoxicity, NK cell activity is positively correlated with the presence of CD160 (5).

## PRODUCT SPECIFIC NOTICES

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