Mouse CD160 Alexa Fluor® 700-conjugated Antibody

Monoclonal Rat IgG_{2A} Clone # 342705

Catalog Number: FAB38991N

100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CD160 in direct ELISAs.
Source	Monoclonal Rat IgG_{2A} Clone # 342705
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD160 Gly28-Ser160 Accession # AAH21596
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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

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 $CD3^+$ NK1.1 cells, $CD8^+$ TEM and TCM T cells, $CD8\alpha^+$ 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 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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475