# CD160 (L-17): sc-69453



The Power to Question

#### **BACKGROUND**

CD160, also known as NK1, BY55 or NK28, is a 181 amino acid lipid-anchored cell membrane glycoprotein that contains one immunoglobulin-like domain. CD160 is expressed in small intestine, spleen, and functional NK (natural killer) and T cytotoxic lymphocytes. It exists as a disulfide-linked homomultimer that functions as a receptor for MHC (major histocompatability complex) molecules and is thought to regulate the function of NK cells. Additionally, CD160 interacts with HVEM (herpesvirus entry mediator) and, via this interaction, is able to negatively regulate CD4+ T cell activation, indicating a role in immune system regulation. Multiple isoforms of CD160 exist due to alternative splicing events. The gene encoding CD160 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

## **REFERENCES**

- Maïza, H., Leca, G., Mansur, I.G., Schiavon, V., Boumsell, L. and Bensussan, A. 1993. A novel 80 kDa cell surface structure identifies human circulating lymphocytes with natural killer activity. J. Exp. Med. 178: 1121-1126.
- Bensussan, A., Gluckman, E., el Marsafy, S., Schiavon, V., Mansur, I.G., Dausset, J., Boumsell, L. and Carosella, E. 1994. BY55 monoclonal antibody delineates within human cord blood and bone marrow lymphocytes distinct cell subsets mediating cytotoxic activity. Proc. Natl. Acad. Sci. USA 91: 9136-9140.
- Anumanthan, A., Bensussan, A., Boumsell, L., Christ, A.D., Blumberg, R.S., Voss, S.D., Patel, A.T., Robertson, M.J., Nadler, L.M. and Freeman, G.J. 1998. Cloning of BY55, a novel Ig superfamily member expressed on NK cells, CTL, and intestinal intraepithelial lymphocytes. J. Immunol. 161: 2780-2790.
- Agrawal, S., Marquet, J., Freeman, G.J., Tawab, A., Bouteiller, P.L., Roth, P., Bolton, W., Ogg, G., Boumsell, L. and Bensussan, A. 1999. Cutting edge: MHC class I triggering by a novel cell surface ligand costimulates proliferation of activated human T cells. J. Immunol. 162: 1223-1226.
- Nikolova, M., Marie-Cardine, A., Boumsell, L. and Bensussan, A. 2002. BY55/CD160 acts as a co-receptor in TCR signal transduction of a human circulating cytotoxic effector T lymphocyte subset lacking CD28 expression. Int. Immunol. 14: 445-451.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 604463. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Giustiniani, J., Marie-Cardine, A. and Bensussan, A. 2007. A soluble form
  of the MHC class I-specific CD160 receptor is released from human activated NK lymphocytes and inhibits cell-mediated cytotoxicity. J. Immunol.
  178: 1293-1300.

## **CHROMOSOMAL LOCATION**

Genetic locus: Cd160 (mouse) mapping to 3 F2.1.

#### **SOURCE**

CD160 (L-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CD160 of mouse origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69453 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

CD160 (L-17) is recommended for detection of CD160 of mouse and rat 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).

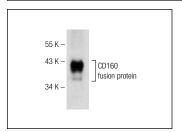
CD160 (L-17) is also recommended for detection of CD160 in additional species, including canine.

Suitable for use as control antibody for CD160 siRNA (m): sc-72825, CD160 shRNA Plasmid (m): sc-72825-SH and CD160 shRNA (m) Lentiviral Particles: sc-72825-V.

Molecular Weight of CD160 monomer: 27 kDa.

Molecular Weight of CD160 homomultimer: 80 kDa.

## DATA



CD160 (L-17): sc-69453. Western blot analysis of mouse recombinant CD160 fusion protein.

# **STORAGE**

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

# **RESEARCH USE**

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

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com