Human Nectin-2/CD112
Alexa Fluor® 750-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 610603

Catalog Number: FAB2229S

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Nectin-2/CD112 by flow cytometry.
Source	Monoclonal Mouse IgG_1 Clone # 610603
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Nectin-2/CD112 isoform a Gln32-Leu360 Accession # NP_002847
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.*

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10^6 cells	K562 human chronic myelogenous leukemia cell line

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

Nectins are a small family of Ca^{++}-independent immunoglobulin (Ig)-like cell adhesion molecules (CAMs) that organize intercellular junctions (1). The nectin family has at least four members (nectin-1-4), all of which show alternate splicing (except for Nectin-4), a transmembrane (TM) region (except for Nectin-1γ), and three extracellular Ig-domains. Nectins are highly homologous to the human receptor for poliovirus, and as such have been alternately named poliovirus receptor-related proteins. They do not, however, appear to bind poliovirus (1). Nectin-2 is a 60 or 65 kDa type I TM glycoprotein that is found on a variety of cell types (2, 3). It has two splice forms (4, 5). Nectin-2δ is a 65 kDa long form and is synthesized as a 538 amino acid precursor. It contains a 31 amino acid (aa) signal sequence, a 329 aa extracellular region, a 21 aa TM segment, and a 157 aa cytoplasmic domain. The extracellular region contains one N-terminal 85 aa V-type Ig domain and two 45-55 aa C2-type Ig domains. The V-domain is believed to mediate nectin binding to its ligands (6). The short, 60 kDa isoform of Nectin-2 (Nectin-2α) has the same signal sequence and extracellular domain as nectin-2δ, but differs in the TM and cytoplasmic region (4, 5). In this case, the cytoplasmic tail is only 94 aa in length. The human extracellular region shows 72% aa sequence identity with the equivalent region in mouse. Nectin-2 is known to bind the pseudorabies virus, and herpes simplex virus-2 (HSV-2), but not HSV-1. It does not bind poliovirus. As a cell adhesion molecule, Nectin-2 will form cis-homodimers (same cell), followed by trans-dimers (across cells). Nectin-2 will not cis-dimerize with other nectins, but will cis-dimerize with its two splice forms. Notably, a Nectin-2 cis-dimer on one cell will heterodimerize with a Nectin-3 cis-dimer on another cell (1). Nectin-2 is found concentrated in adherens junctions, and exists on neurons, endothelial cells, epithelial cells and fibroblasts.

References:

1. Takai, Y. and H. Nakanishi, 2003, J. Cell Sci. **116**:17.
2. Bottino, C. *et al.* (2003) J. Exp. Med. **198**:557.
3. Pende, D. *et al.* (2005) Mol. Immunol. **42**:463.
4. Eberle, F. *et al.* (1995) Gene **159**:267.
5. Warner, M.S. *et al.* (1998) Virology **246**:179.
6. Struyf, F. *et al.* (2002) J. Virol. **76**:12940.

PRODUCT SPECIFIC NOTICES

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 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449