Mouse CXADR Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2654

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CXADR in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 35% cross-reactivity with recombinant human CXADR is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CXADR Leu20-Gly237 Accession # P97792
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

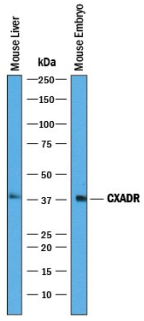
APPLICATIONS

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
Western Blot	0.25 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	Immersion fixed frozen sections of mouse embryo (E15.5)
Simple Western	12.5 µg/mL	See Below

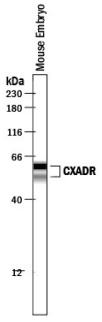
DATA

Western Blot



Detection of Mouse CXADR by Western Blot. Western blot shows lysates of mouse liver tissue and mouse embryo tissue. PVDF membrane was probed with 0.25 µg/mL of Goat Anti-Mouse CXADR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2654) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for CXADR at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western



Detection of Mouse CXADR by Simple Western™. Simple Western lane view shows lysates of mouse embryo tissue, loaded at 0.2 mg/mL. Specific bands were detected for CXADR at approximately 60 and 53 kDa (as indicated) using 12.5 µg/mL of Goat Anti-Mouse CXADR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2654) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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

Mouse CXADR Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2654

BACKGROUND

CXADR (Coxsackie and Adenovirus Receptor), also known as CAR, is a 46 kDa type I transmembrane glycoprotein that belongs to the CTX family of the Ig superfamily (1-3). CXADR has received attention as a receptor that facilitates gene transfer mediated by most adenoviruses (1, 2). It is also an adhesion molecule within junctional complexes, notably between epithelial cells lining body cavities and within myocardial intercalated discs (1, 2, 4). CXADR is essential for normal cardiac development in the mouse (7). It is expressed throughout brain neuroepithelium during development, but mainly in ependymal cells in the adult (4-6). The 365 amino acid (aa) mouse CXADR contains a 19 aa signal sequence, a 218 aa extracellular domain (ECD) with a V-type (D1) and a C2-type (D2) Ig-like domain, a 21 aa transmembrane segment and a 107 aa intracellular domain. D1 is thought to be responsible for homodimer formation in trans within tight junctions (2). The fiber knob of adenoviruses attaches at a similar site, and evidence suggests that disruption of tight junctions facilitates virus binding (1, 2). A PDZ binding motif at the C-terminus interacts with several cytoplasmic junctional proteins (1). The ECD of mouse CXADR shares 97%, 90%, 89%, 89% and 88% aa sequence identity with the corresponding regions of rat, human, bovine, porcine and canine CXADR, respectively. An alternately spliced isoform (CXADR2) that diverges in the C-terminal 15 aa shows the same expression pattern, but may show different subcellular localization (4, 8). Transcription of other splice variants has been detected, but not their translation. A secreted form identified in serum and pleural fluid can block viral infection (9).

References:

1. Coyne, C.B. and J.M. Bergelson (2005) Adv. Drug Deliv. Rev. **57**:869.
2. Philipson, L. and R.F. Pettersson (2004) Curr. Top. Microbiol. Immunol. **273**:87.
3. Tomko, R.P. *et al.* (1997) Proc. Natl. Acad. Sci. USA **94**:3352.
4. Raschperger, E. *et al.* (2006) Exp. Cell Res. **312**:1566.
5. Hotta, Y. *et al.* (2003) Dev. Brain Res. **143**:1.
6. Hauwel, M. *et al.* (2005) Brain Res. Rev. **48**:265.
7. Chen, J. *et al.* (2006) Circ. Res. **98**:923.
8. Mirza, M. *et al.* (2006) Exp. Cell Res. **312**:817.
9. Bernal, R.M. *et al.* (2002) Clin. Cancer Res. **8**:1915.

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