

Cml2 (D-13): sc-139321

BACKGROUND

Cml2 (camello-like 2) is a 238 amino acid multi-pass membrane protein belonging to the camello family. Members of the camello family share sequence similarities to the *Xenopus* protein camello, which is expressed in the suprablastoporal zone of gastrulating embryos. *Xenopus* camello is believed to play a role in gastrulation movements by modifying the cell surface and extracellular matrix proteins passing through the secretory pathway. Other members of the camello family include Cml1, Cml3, NAT-8, NAT-8L, NAT-8B and Cml5. Containing one N-acetyltransferase domain, Cml2 may participate in regulation of gastrulation. Cml2 is encoded by a gene located on mouse chromosome 6.

REFERENCES

1. Popsueva, A.E., et al. 2001. Overexpression of camello, a member of a novel protein family, reduces blastomere adhesion and inhibits gastrulation in *Xenopus laevis*. *Dev. Biol.* 234: 483-496.
2. Klein, S.L., et al. 2002. Genetic and genomic tools for *Xenopus* research: The NIH *Xenopus* initiative. *Dev. Dyn.* 225: 384-391.
3. Da Cruz, S., et al. 2003. Proteomic analysis of the mouse liver mitochondrial inner membrane. *J. Biol. Chem.* 278: 41566-41571.
4. Juhanson, P., et al. 2008. N-acetyltransferase 8, a positional candidate for blood pressure and renal regulation: resequencing, association and in silico study. *BMC Med. Genet.* 9: 25.
5. McMahon, A.P., et al. 2008. GUDMAP: the genitourinary developmental molecular anatomy project. *J. Am. Soc. Nephrol.* 19: 667-671.
6. Ariyannur, P.S., et al. 2010. Methamphetamine-induced neuronal protein NAT8L is the NAA biosynthetic enzyme: implications for specialized acetyl coenzyme A metabolism in the CNS. *Brain Res.* 1335: 1-13.
7. Veiga-da-Cunha, M., et al. 2010. Molecular identification of NAT8 as the enzyme that acetylates cysteine S-conjugates to mercapturic acids. *J. Biol. Chem.* 285: 18888-18898.

CHROMOSOMAL LOCATION

Genetic locus: Cml2 (rat) mapping to 4q34.

SOURCE

Cml2 (D-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of Cml2 of rat origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139321 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Cml2 (D-13) is recommended for detection of Cml2 of rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with Cml5.

Molecular Weight of Cml2: 26 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.