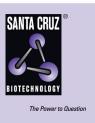
SANTA CRUZ BIOTECHNOLOGY, INC.

Cml5 (L-12): sc-139333



BACKGROUND

Acetyltransferases and deacetylases are protein groups most often associated with oncogenesis and cell cycle regulation. Cml5 (camello-like protein 5), also known as probable N-acetyltransferase CML5, is a 227 amino acid multi-pass membrane protein that contains one N-acetyltransferase domain and belongs 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, Cml2, Cml3, NAT-8, NAT-8L and NAT-8B5. Cml5 may play a role in regulation of gastrulation, and is encoded by a gene that maps to mouse chromosome 6 C3.

REFERENCES

- 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.
- McMahon, A.P., et al. 2008. GUDMAP: the genitourinary developmental molecular anatomy project. J. Am. Soc. Nephrol. 19: 667-671.
- Arun, P., et al. 2009. Evidence for mitochondrial and cytoplasmic Nacetylaspartate synthesis in SH-SY5Y neuroblastoma cells. Neurochem. Int. 55: 219-225.
- Wiame, E., et al. 2010. Molecular identification of aspartate N-acetyltransferase and its mutation in hypoacetylaspartia. Biochem. J. 425: 127-136.
- 8. 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.

CHROMOSOMAL LOCATION

Genetic locus: CmI5 (rat) mapping to 4q34.

SOURCE

CmI5 (L-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of CmI5 of rat origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-139333 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Cml5 (L-12) is recommended for detection of Cml5 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 Cml1.

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) Immunofluo-rescence: 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.