

CMBL (FL-245): sc-134616

BACKGROUND

CMBL (carboxymethylenebutenolidase homolog) is a 245 amino acid cytosolic protein and cysteine hydrolase that preferentially cleaves cyclic esters. A member of the dienelactone hydrolase family, CMBL is the human homolog of *Pseudomonas* dienelactone hydrolase, a protein that participates in the bacterial halocatechol degradation pathway. CMBL is ubiquitously expressed with high expression in liver, colon, kidney and small intestine, where it acts as a bio-activating enzyme for a prodrug type angiotensin II type 1 receptor antagonist known as olmesartan medoxomil. CMBL is inhibited by p-chloro-mercuribenzoate (PCMB) and is encoded by a gene that maps to human chromosome 5p15.2. Chromosome 5 contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri-du-chat syndrome, while deletion of the q arm, or of chromosome 5 altogether, is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

1. Nussberger, J., et al. 2004. Antagonizing the angiotensin II subtype 1 receptor: a focus on olmesartan medoxomil. *Clin. Ther.* 26: A12-A20.
2. Mire, D.E., et al. 2005. A review of the structural and functional features of olmesartan medoxomil, an angiotensin receptor blocker. *J. Cardiovasc. Pharmacol.* 46: 585-593.

CHROMOSOMAL LOCATION

Genetic locus: CMBL (human) mapping to 5p15.2; Cmb1 (mouse) mapping to 15 B2.

SOURCE

CMBL (FL-245) is a rabbit polyclonal antibody raised against amino acids 1-245 representing full length CMBL of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CMBL (FL-245) is recommended for detection of CMBL of mouse, rat and human 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).

CMBL (FL-245) is also recommended for detection of CMBL in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CMBL siRNA (h): sc-92035, CMBL siRNA (m): sc-142410, CMBL shRNA Plasmid (h): sc-92035-SH, CMBL shRNA Plasmid (m): sc-142410-SH, CMBL shRNA (h) Lentiviral Particles: sc-92035-V and CMBL shRNA (m) Lentiviral Particles: sc-142410-V.

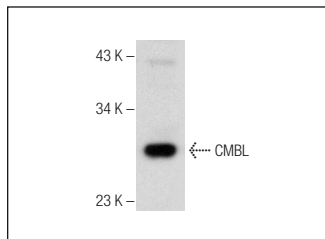
Molecular Weight of CMBL: 28 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

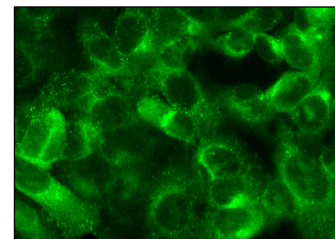
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CMBL (FL-245): sc-134616. Western blot analysis of CMBL expression in HeLa whole cell lysate.



CMBL (FL-245): sc-134616. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic localization.

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.

MONOS
Satisfaction
Guaranteed

Try **CMBL (B-5): sc-514233** or **CMBL (C-5): sc-374248**, our highly recommended monoclonal alternatives to CMBL (FL-245).