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Enigma (h): 293T Lysate: sc-170164

BACKGROUND

Enigma, also known as PDLIM7 (PDZ and LIM domain 7) or LMP1 (LIM mineralization protein), is a 457 amino acid protein that localizes to both the cytoplasm and the cytoskeleton. Expressed ubiquitously with highest expression in skeletal muscle, spleen, lung and fetal liver, Enigma is thought to function as a scaffold on which protein assembly can occur. Enigma contains three LIM zinc-binding domains and one PDZ domain through which it may also act as an adaptor, linking various proteins to Actin filaments found in skeletal muscle and non-muscle tissues. Additionally, Enigma is directly involved in the two mechanisms of bone formation, namely direct bone formation (embryonic flat bones mandible and cranium) and endochondral bone formation (embryonic long bone development), and may play a role in bone fracture repair. Six isoforms of Enigma exist due to alternative splicing events.

REFERENCES

1. Wu, R.Y. and Gill, G.N. 1994. LIM domain recognition of a tyrosine-containing tight turn. *J. Biol. Chem.* 269: 25085-25090.
2. Durick, K., et al. 1998. Shc and Enigma are both required for mitogenic signaling by Ret/ptc2. *Mol. Cell. Biol.* 18: 2298-2308.
3. Guy, P.M., et al. 1999. The PDZ domain of the LIM protein Enigma binds to β -Tropomyosin. *Mol. Biol. Cell* 10: 1973-1984.
4. Bach, I. 2000. The LIM domain: regulation by association. *Mech. Dev.* 91: 5-17.
5. Borrello, M.G., et al. 2002. Differential interaction of Enigma protein with the two Ret isoforms. *Biochem. Biophys. Res. Commun.* 296: 515-522.
6. Liu, Y., et al. 2002. Overexpressed LIM mineralization proteins do not require LIM domains to induce bone. *J. Bone Miner. Res.* 17: 406-414.
7. Barrès, R., et al. 2006. Enigma interacts with adaptor protein with PH and SH2 domains to control Insulin-induced Actin cytoskeleton remodeling and glucose transporter 4 translocation. *Mol. Endocrinol.* 20: 2864-2875.
8. Fei, Q., et al. 2007. Truncated human LMP-1 triggers differentiation of C2C12 cells to an osteoblastic phenotype *in vitro*. *Acta Biochim. Biophys. Sin.* 39: 693-700.
9. Wang, X., et al. 2008. Immunohistochemical localization of LIM mineralization protein 1 in pulp-dentin complex of human teeth with normal and pathologic conditions. *J. Endod.* 34: 143-147.

CHROMOSOMAL LOCATION

Genetic locus: PDLIM7 (human) mapping to 5q35.3.

PRODUCT

Enigma (h): 293T Lysate represents a lysate of human Enigma transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Enigma (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Enigma antibodies. Recommended use: 10-20 μ l per lane.

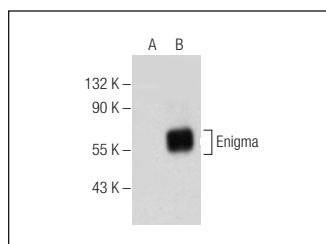
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Enigma (D-10): sc-376359 is recommended as a positive control antibody for Western Blot analysis of enhanced human Enigma expression in Enigma transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Enigma (D-10): sc-376359. Western blot analysis of Enigma expression in non-transfected: sc-117752 (A) and human Enigma transfected: sc-170164 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.