

POEM (Q-17): sc-102061

BACKGROUND

POEM, also known as Nephronectin or EGFL6L, is a 565 amino acid member of the nephronectin family that contains five EGF-like domains and an Arg-Gly-Asp (RGD) cell binding motif, as well as a meprin, A5 protein and receptor protein-tyrosine phosphatase μ (MAM) domain. Expressed in kidney, thyroid and parathyroid glands, developing bone, tooth germ, skeletal and smooth muscle, brain and skin, POEM is involved in the development and function of bone, muscle and kidney tissue. The most established function of POEM is as a ligand to the receptor Integrin $\alpha 8/\beta 1$. Highly expressed in the nephritic cord, Integrin $\alpha 8/\beta 1$ plays a critical role in kidney morphogenesis and development. The POEM-Integrin $\alpha 8/\beta 1$ complex regulates the expression of GDNF, another protein that affects kidney development, specifically by regulating the growth of the uretic bud. There are two named isoforms of POEM, both of which form homodimers or homotrimers.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NPNT (human) mapping to 4q24; Npnt (mouse) mapping to 3 G3.

SOURCE

POEM (Q-17) is a purified rabbit polyclonal antibody raised against POEM of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

POEM (Q-17) is recommended for detection of POEM of mouse, rat, human and dog origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for POEM siRNA (h): sc-88967, POEM siRNA (m): sc-152365, POEM shRNA Plasmid (h): sc-88967-SH, POEM shRNA Plasmid (m): sc-152365-SH, POEM shRNA (h) Lentiviral Particles: sc-88967-V and POEM shRNA (m) Lentiviral Particles: sc-152365-V.

Molecular Weight of POEM: 70-90 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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).

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
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Guaranteed

Try **POEM (G-1): sc-393033**, our highly recommended monoclonal alternative to POEM (Q-17).