

DOM3Z (B-12): sc-393141

BACKGROUND

DOM3Z (dom-3 homolog Z), also known as NG6 or DOM3L, is a 396 amino acid ubiquitously expressed protein belonging to the DOM3Z family. The gene encoding DOM3Z maps to human chromosome 6 in the major histocompatibility complex (MHC) class III region. Chromosome 6 contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, porphyria cutanea tarda, Parkinson's disease and Stickler syndrome are all associated with genes that map to chromosome 6.

REFERENCES

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3. Yang, Z., et al. 1998. Four ubiquitously expressed genes, RD (D6S45)-SK12W (SKIV2L)-DOM3Z-RP1 (D6S60E), are present between complement component genes factor B and C4 in the class III region of the HLA. *Genomics* 53: 338-347.
4. Yang, Z. and Yu, C.Y. 2000. Organizations and gene duplications of the human and mouse MHC complement gene clusters. *Exp. Clin. Immunogenet.* 17: 1-17.
5. Cesari, R., et al. 2003. Parkin, a gene implicated in autosomal recessive juvenile parkinsonism, is a candidate tumor suppressor gene on chromosome 6q25-q27. *Proc. Natl. Acad. Sci. USA* 100: 5956-5961.
6. Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. *Genes Chromosomes Cancer* 47: 159-164.
7. Xiang, S., et al. 2009. Structure and function of the 5'→3' exoribonuclease Rat1 and its activating partner Rai1. *Nature* 458: 784-788.
8. Jalil, S., et al. 2010. Associations among behavior-related susceptibility factors in porphyria cutanea tarda. *Clin. Gastroenterol. Hepatol.* 8: 297-302.e1.

CHROMOSOMAL LOCATION

Genetic locus: DXO (human) mapping to 6p21.33; Dxo (mouse) mapping to 17 B1.

SOURCE

DOM3Z (B-12) is a mouse monoclonal antibody raised against amino acids 82-381 mapping within an internal region of DOM3Z of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

DOM3Z (B-12) is recommended for detection of DOM3Z of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DOM3Z siRNA (h): sc-95321, DOM3Z siRNA (m): sc-143143, DOM3Z shRNA Plasmid (h): sc-95321-SH, DOM3Z shRNA Plasmid (m): sc-143143-SH, DOM3Z shRNA (h) Lentiviral Particles: sc-95321-V and DOM3Z shRNA (m) Lentiviral Particles: sc-143143-V.

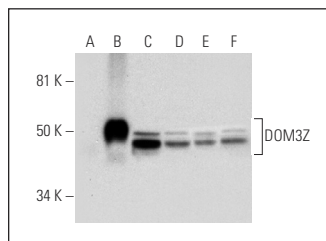
Molecular Weight of DOM3Z: 45 kDa.

Positive Controls: DOM3Z (h3): 293T Lysate: sc-173189, Raji whole cell lysate: sc-364236 or MCF7 whole cell lysate: sc-2206.

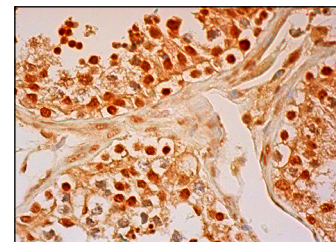
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



DOM3Z (B-12): sc-393141. Western blot analysis of DOM3Z expression in non-transfected 293T: sc-117752 (A), human DOM3Z transfected 293T: sc-173189 (B), SH-SY5Y (C), Raji (D), MOLT-4 (E) and MCF7 (F) whole cell lysates.



DOM3Z (B-12): sc-393141. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts and Leydig cells.

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.