

DOM3Z (T-13): sc-161034

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

1. Brunner, H.G., et al. 1994. A Stickler syndrome gene is linked to chromosome 6 near the COL11A2 gene. *Hum. Mol. Genet.* 3: 1561-1564.
2. Yu, C.Y. 1998. Molecular genetics of the human MHC complement gene cluster. *Exp. Clin. Immunogenet.* 15: 213-230.
3. Yang, Z., et al. 1998. Four ubiquitously expressed genes, RD (D6S45)-SKI2W (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.

CHROMOSOMAL LOCATION

Genetic locus: DOM3Z (human) mapping to 6p21.33; Dom3z (mouse) mapping to 17 B1.

SOURCE

DOM3Z (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DOM3Z 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.

Blocking peptide available for competition studies, sc-161034 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DOM3Z (T-13) is recommended for detection of DOM3Z 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).

DOM3Z (T-13) is also recommended for detection of DOM3Z in additional species, including canine and bovine.

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.

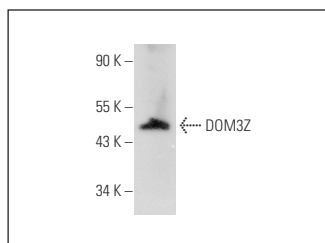
Molecular Weight of DOM3Z: 45 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138, HeLa nuclear extract: sc-2120 or MCF7 whole cell lysate: sc-2206.

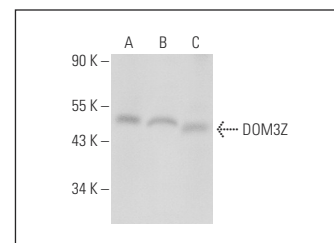
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



DOM3Z (T-13): sc-161034. Western blot analysis of DOM3Z expression in HeLa nuclear extract.



DOM3Z (T-13): sc-161034. Western blot analysis of DOM3Z expression in NIH/3T3 nuclear extract (A) and MCF7 (B) and NIH/3T3 (C) whole cell lysates.

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.