# DOM3Z (G-14): sc-161032



The Power to Question

#### **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**

- Brunner, H.G., van Beersum, S.E., Warman, M.L., Olsen, B.R., Ropers, H.H. and Mariman, E.C. 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., Shen, L., Dangel, A.W., Wu, L.C. and Yu, C.Y. 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.
- Cesari, R., Martin, E.S., Calin, G.A., Pentimalli, F., Bichi, R., McAdams, H., Trapasso, F., Drusco, A., Shimizu, M., Masciullo, V., D'Andrilli, G., Scambia, G., Picchio, M.C., Alder, H., Godwin, A.K. and Croce, C.M. 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., Mechtersheimer, G., Sutter, C., Hertkorn, C., Kern, M.A., Rieker, R.J., Penzel, R., Schirmacher, P. and Kloor, M. 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., Cooper-Morgan, A., Jiao, X., Kiledjian, M., Manley, J.L. and Tong, L. 2009. Structure and function of the 5'→ 3' exoribonuclease Rat1 and its activating partner RAI1. Nature 458: 784-788.
- 8. Jalil, S., Grady, J.J., Lee, C. and Anderson, K.E. 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 (G-14) 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  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161032 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

DOM3Z (G-14) 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), 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 (G-14) is also recommended for detection of DOM3Z in additional species, including canine, bovine and porcine.

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: mouse testis extract: sc-2405.

## **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) 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.

## **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.



Try **DOM3Z (D-9):** sc-393167 or **DOM3Z (B-12):** sc-393141, our highly recommended monoclonal alternatives to DOM3Z (G-14).