BOSTER BIOLOGICAL TECHNOLOGY Co.,Ltd.
3942 B Valley Ave, Pleasanton, CA, 94566
Phone: 888-466-3604 Fax: 925-215-2184 Email: boster@bosterbio.com Web: www.bosterbio.com

Polyclonal Anti-ZEB2 Antibody

Catalog Number: PA1959

Description

Gene Name	zinc finger E-box binding homeobox 2
Recommended Protein Name	Zinc finger E-box-binding homeobox 2
Lot No.	0191312c015912
Size	100μg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	**Reacts with:** human **Predicted to work with**: mouse, rat
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ZEB2(948-962aa DMQQRRKYQRKQGFQ), identical to the related rat and mouse sequences.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg Thimerosal, 0.05mg NaN_3.

Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5μg/ml	Hu	Ms, Rat	-

WB: The detection limit for ZEB2 is approximately 0.5ng/lane under reducing conditions.

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500μg/ml.

Storage: At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for a longer time.
Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB.

Background

ZEB2 (Zinc finger E-box-binding homeobox2), also known as SIP1or ZINC FINGER HOMEOBOX 1B (ZFHX1B), is a protein that in humans is encoded by the ZEB2 gene. The ZEB2 gene is a member of the ZEB1/Drosophila Zfh1 family of 2-handed zinc finger/homeodomain proteins and functions as a DNA-binding transcriptional repressor that interacts with activated SMADs, the transducers of TGF-beta signaling, and interacts with the nucleosome remodeling and histone deacetylation (NURD) complex. By radiation hybrid analysis, Nagase et al. (1998) mapped the ZEB2 gene to chromosome 2. Wakamatsu et al. (2001) mapped the ZEB2 gene to chromosome 2q22. Vandewalle et al. (2005) showed that expression of mouse Sip1 in human epithelial cells caused a morphologic change from an epithelial to a mesenchymal phenotype. Expression of SNAI1 in epithelial cells triggers an epithelial-mesenchyme transition. Beltran et al. (2008) showed that synthesis of ZEB2 was upregulated following SNAI1 expression in human cell lines.

Reference

1. Beltran, M., Puig, I., Pena, C., Garcia, J. M., Alvarez, A. B., Pena, R., Bonilla, F., Garcia de Herreros, A. A natural antisense transcript regulates Zeb2/Sip1 gene expression during Snail1-induced epithelial-mesenchymal transition. Genes Dev. 22: 756-769, 2008.
2. Nagase, T., Ishikawa, K., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N., Ohara, O. Prediction of the coding sequences of unidentified human genes. IX. The complete sequences of 100 new cDNA clones from brain which can code for large proteins in vitro. DNA Res. 5: 31-39, 1998.
3. Vandewalle, C., Comijn, J., De Craene, B., Vermassen, P., Bruyneel, E., Andersen, H., Tulchinsky, E., Van Roy, F., Berx, G. SIP1/ZEB2 induces EMT by repressing genes of different epithelial cell-cell junctions. Nucleic Acids Res. 33: 6566-6578, 2005.
4. Wakamatsu, N., Yamada, Y., Yamada, K., Ono, T., Nomura, N., Taniguchi, H., Kitoh, H., Mutoh, N., Yamanaka, T., Mushiake, K., Kato, K., Sonta, S., Nagaya, M. Mutations in SIP1, encoding Smad interacting protein-1, cause a form of Hirschsprung disease. Nature Genet. 27: 369-370, 2001.