
anti-hDlg-1

Cat #: HM1173
Mouse monoclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

Discs large (dlg) is a tumor suppressor gene identified in *Drosophila* through genetic analysis of germline mutations. Several mammalian homologs were identified and categorized into a protein family termed MAGUK (membrane-associated guanylate kinase homolog). Human homologs of dlg include hDlg-1 and NE-dlg (neuronal and endocrine dlg). MAGUKs are localized at the membrane-cytoskeleton interface and contain several distinct domains which suggest a role for these proteins in intracellular signal transduction. Like other MAGUKs, hDlg-1 contains several protein-protein interaction domains: three PDZ domains, an SH3 domain, and a C-terminal guanylate kinase homology region that may act as a protein-binding domain. hDlg-1 is known to interact with the tumor suppressor protein APC and the human papillomavirus E6 transforming protein., supporting its involvement in cellular growth control.

SPECIFICITY

This antibody specifically reacts with hDlg-1 of human, mouse and rat origin.

The antibody can be used in Western blotting, immunoprecipitation and immunohistochemistry.

IMMUNOGEN

A synthetic peptide derived from N-terminus of human hDlg-1 protein.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES

1. Lue, R.A., Marfatia, S.M., Branton, D., and Chishti, A. H. 1994. Cloning and characterization of hdlg: the human homologue of the *Drosophila* discs large tumor suppressor binds to protein 4.1. Proc. Natl. Acad. Sci. USA 91: 9818-9822.
2. Muller, B.M., Kistner, U., Veh, R.W., Cases-Langhoff, C., Becker, B., Gundelfinger, E.D., and Garner, C.C. 1995. Molecular characterization and spatial distribution of SAP97, a novel presynaptic protein homologous to SAP90 and the *Drosophila* discs-large tumor suppressor protein. J. Neurosci. 15: 2354-2356.
3. Makino, K., Kuwahara, H., Masuko, N., Nishiyama, Y., Morisaki, T., Sasaki, J.-i., Nakao, M., Kuwano, A., Nakata, M., Ushio, Y., and Saya, H. 1997. Cloning and characterization of NE-dlg: a novel human homolog of the *Drosophila* discs large (dlg) tumor suppressor protein interacts with the APC protein. Oncogene 14: 2425-2433.

4. Cho, K.O., Hunt, C.A., and Kennedy, M.B. 1992. The rat brain postsynaptic density fraction contains a homolog of the *Drosophila* discs-large tumor suppressor protein. Neuron 9: 929-942.
5. Matsumine, A., Ogai, A., Senda, T., Okumura, N., Satoh, K., Baeg, G.H., Kawahara, T., Kobayashi, S., Okada, M., Toyoshima, K., and Akiyama, T. 1996. Binding of APC to the human homolog of the *Drosophila* discs large tumor suppressor protein. Science 272: 1020-1023.
6. Kohu, K., Ogawa, F., and Akiyama, T. 2002. The SH3, HOOK and guanylate kinase-like domains of hDLG are important for its cytoplasmic localization. Genes Cells 7, 707-715.

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