

HOP Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant HOP. Catalog # AT2401a

Specification

HOP Antibody (monoclonal) (M01) - Product Information

Application WB, E **Primary Accession** O9BPY8 BC014225 Other Accession Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 kappa Calculated MW 8260

HOP Antibody (monoclonal) (M01) - Additional Information

Gene ID 84525

Other Names

Homeodomain-only protein, Lung cancer-associated Y protein, Not expressed in choriocarcinoma protein 1, Odd homeobox protein 1, HOPX, HOD, HOP, LAGY, NECC1, OB1

Target/Specificity

HOP (AAH14225, 1 a.a. \sim 73 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2.

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

HOP Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

HOP Antibody (monoclonal) (M01) - Protocols

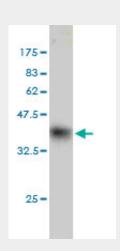
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

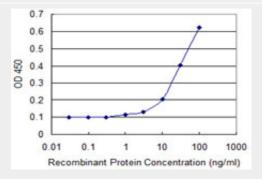


- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HOP Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (33.77 KDa).



Detection limit for recombinant GST tagged HOP is approximately 3ng/ml as a capture antibody.

HOP Antibody (monoclonal) (M01) - Background

The protein encoded by this gene is a homeodomain protein that lacks certain conserved residues required for DNA binding. It was reported that choriocarcinoma cell lines and tissues failed to express this gene, which suggested the possible involvement of this gene in malignant conversion of placental trophoblasts. Studies in mice suggest that this protein may interact with serum response factor (SRF) and modulate SRF-dependent cardiac-specific gene expression and cardiac development. Multiple alternatively spliced transcript variants have been identified for this gene.

HOP Antibody (monoclonal) (M01) - References

Expression of the homeobox gene, HOPX, is modulated by cell differentiation in human keratinocytes and is involved in the expression of differentiation markers. Yang JM, et al. Eur J Cell Biol, 2010 Jul. PMID 20226564. Homeobox gene HOPX is epigenetically silenced in human uterine endometrial cancer and suppresses estrogen-stimulated proliferation of cancer cells by inhibiting serum response factor. Yamaguchi S, et al. Int J Cancer, 2009 Jun 1. PMID 19173292. Regulation of survival in adult hippocampal and glioblastoma stem cell lineages by the homeodomain-only protein HOP. De Toni A, et al. Neural Dev, 2008 May 28. PMID 18507846. HOP/OB1/NECC1 promoter DNA is frequently hypermethylated and involved in tumorigenic ability in esophageal squamous cell





carcinoma. Yamashita K, et al. Mol Cancer Res, 2008 Jan. PMID 18234960.Importance of the C-terminal domain of Harc for binding to Hsp70 and Hop as well as its response to heat shock. Cartledge K, et al. Biochemistry, 2007 Dec 25. PMID 18052042.