Technical Data Sheet

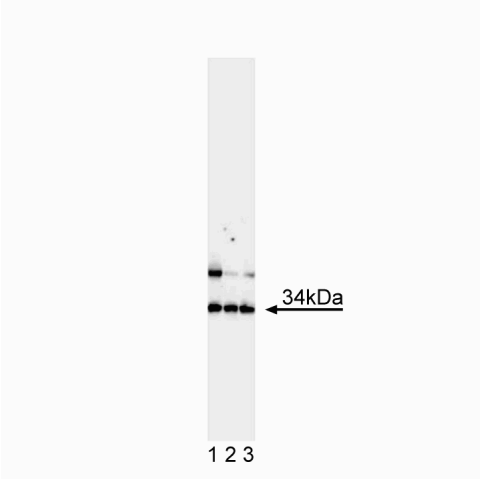
Purified Mouse Anti-MASH1

Product Information

Material Number:	**556604**
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	24B72D11.1
Immunogen:	Rat MASH1 full length recombinant protein
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Mouse
Target MW:	34 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

MASH1 and MASH2 (Mammalian achaete-schute Homolog 1 and 2) are basic helixloop-helix transcription factors which are mammalian homologs of the *achaete-schute* gene family that is required for neuronal development in Drosophila. The bHLH motif is present in many types of transcription factors including E2-2, E47, MyoD and others. MASH1 has been shown to heterodimerize with other bHLH containing transcription factors. MASH1-E12 heteromers bind to and promote transcriptional activation of muscle creatine kinase, a known target for MyoD activation. However, MASH1 appears to play its primary role during early development of the autonomic nervous system. In committed neuronal precursor cells, early expression of MASH1 activates a subset of neuron-specific genes to promote differentiation. Thus null mutations in the MASH1 gene suggest that MASH1 is a valuable marker for investigation of neural development in mammals. MASH1 is observed as an ~34 kDa protein by SDS-PAGE.



Western blot analysis of MASH1. *Lysate from rat embryonic brain was probed with anti-MASH1 (clone 24B72D11.1, Cat. No. 556604) at concentrations of 2.0 (lane 1), 1.0 (lane 2), and 0.5 µg/ml (lane 3). MASH1 is identified as a band of ~34 kDa.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4°C.

Application Notes

Application

Western blot	Routinely Tested
Immunochemistry	Reported

Recommended Assay Procedure:

The 24B72D11.1 antibody is recommended for western blot analysis (0.5-2.0 µg/ml). Rat embryonic brain can be used as a positive control. Neuro2A mouse neuroblastoma cells (ATCC CCL-131) may also be used as a positive control for this application.
Western blot: For more detailed information please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

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The 24B72D11.1 antibody is reported in the literature to work well for immunohistochemistry. *Immunohistochemistry*: For more detailed information please refer to the cited journal references and http://www.bdbiosciences.com/support/resources/cell_biology/index.jsp

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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