Technical Data Sheet

Purified Mouse Anti-Human PU.1

Product Information

Material Number:	**554268**
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	G148-74
Immunogen:	PU.1 Fusion Protein
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Human
Target MW:	40-42 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

PU.1 is an ets-related transcription factor expressed in B lymphocytes and macrophages. It was initially identified as the oncogene *Spi*-1 which was found to block erythroblast differentiation. PU.1 functions by binding transcriptional control elements such as µB in the immunoglobulin heavy chain enhancer and π adjacent to µE2. It has been shown to form a complex with NF-EM5, a B cell transcription factor, resulting in the activation of the immunoglobulin κ 3' enhancer. PU.1 also appears to be critically involved in the control of monocyte development by regulating the expression of the macrophage colony-stimulating factor receptor. PU.1 runs as a 40-42 kDa protein on SDS-PAGE. G148-74 recognizes human PU.1, an Ets-related transcription factor. PU.1 is expressed in B lymphocytes and macrophages and like other Ets-related proteins, binds to consensus sites in DNA through an 85 amino acid Ets domain in the carboxyl terminal region of the protein. The antibody was raised against a bacterially expressed GST-PU.1 fusion protein.

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
Gel shift	Tested During Development
Immunoprecipitation	Tested During Development

Recommended Assay Procedure:

Applications include gel shift, western blot analysis (1-2 µg/ml) and immunoprecipitation. The antibody has been shown to recognize in vitro translated PU.1 and PU.1 expressed as a recombinant protein in bacteria. In. In gel shift assays using µB as a probe (µB is a transcriptional element in the immunoglobulin heavy chain enhancer), G148-74 supershifts the complex of probe and PU.1.

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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