Technical Data Sheet

Purified Rat Anti-Mouse Panendothelial Cell Antigen

Product Information

Material Number:	**553849**
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	MECA-32
Immunogen:	Mouse lymph node stromal cells
Isotype:	Rat IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The MECA-32 antibody reacts with a dimer of 50-55-kDa subunits expressed on most or all endothelial cells in the embryonic and adult mouse, with the exception of cardiac and skeletal muscle and the brain. Normally in skeletal and cardiac muscle, MECA-32 antigen expression is limited to small arterioles and venules; however, under conditions of inflammation, it can be induced on previously non-expressing vessels in cardiac muscle. In the central nervous system (CNS), the panendothelial cell antigen expression is developmentally regulated. During embryonic development, the antigen is found on brain vasculature up to day 16 of gestation, after which it disappears. The cessation of MECA-32 antigen expression in the CNS may be associated with the establishment of the blood-brain barrier, which begins on day 16 of gestation. In the adult mouse, inflammation in the CNS can lead to re-expression of the panendothelial cell antigen.

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

Flow cytometry	Routinely Tested
Immunoprecipitation	Reported
Immunohistochemistry-frozen	Reported
Immunocytochemistry (cytospins)	Reported
Western blot	Reported

Recommended Assay Procedure:
For IHC, we recommend the use of purified MECA-32 mAb in our special formulation for immunohistochemistry, Cat. No. 550563.

Suggested Companion Products

Catalog Number	Name	Size	Clone
553927	Purified Rat IgG2a, κ Isotype Control	0.5 mg	R35-95
554016	FITC Goat Anti-Rat Ig	0.5 mg	Polyclonal

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

Bergese SD, Pelletier RP, Ohye RG, Vallera DA, Orosz CG. Treatment of mice with anti-CD3 mAb induces endothelial vascular cell adhesion molecule-1 expression. *Transplantation.* 1994; 57(5):711-717.(Clone-specific: Immunohistochemistry)
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Leppink DM, Bishop DK, Sedmak DD, et al. Inducible expression of an endothelial cell antigen on murine myocardial vasculature in association with interstitial cellular infiltration. *Transplantation.* 1989; 48(5):874-877.(Immunogen: Immunohistochemistry)
Orosz CG, van Buskirk A, Sedmak DD, Kincade P, Miyake K, Pelletier RP. Role of the endothelial adhesion molecule VCAM in murine cardiac allograft rejection. *Immunol Lett.* 1992; 32(1):7-12.(Clone-specific: Immunohistochemistry)
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