Technical Data Sheet

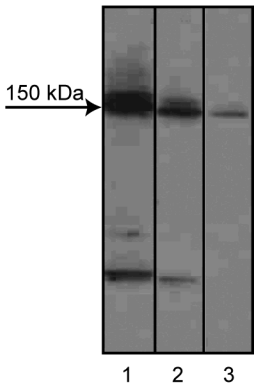
Purified Mouse Anti-LAR

Product Information

Material Number:	**610350**
Alternate Name:	Leukocyte common Antigen-Related
Size:	50 µg
Concentration:	250 µg/ml
Clone:	7/LAR
Immunogen:	Human LAR aa. 24-196
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat
Target MW:	150 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

The Leukocyte common Antigen-Related (LAR) receptor protein tyrosine phosphatase (RPTP) is one of approximately 20 known, distinct transmembrane RPTPs. LAR consists of an extracellular region with three Ig-like and eight fibronectin type III-like (FNIII) domains and a cytoplasmic region containing two tyrosine phosphatase domains typical of RPTPs. The Ig and FNIII domains of LAR show some sequence similarity to domains in the neural cell adhesion molecule N-CAM, a neural surface glycoprotein which mediates cell adhesion and neurite outgrowth. Studies suggest that LAR regulates neurite outgrowth and pathfinding during neural development. N-CAM and other cell adhesion molecules that affect neurite outgrowth, such as L1, TAG-1, and fasciculin II, lack intrinsic kinase or phosphatase activity. Thus, LAR is part of a distinct class of proteins with both cell adhesion and tyrosine phosphatase functions. LAR transcripts are alternatively spliced and that splicing is regulated during development. It is postulated that the various spliced forms of LAR each have specialized functions in the nervous system and play a role in neural development and regeneration.



Western blot analysis of LAR on a human endothelial cell lysate. *Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-LAR antibody.*

Preparation and Storage

Store undiluted at -20° C.
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Not Recommended

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Immunoprecipitation	Not Recommended
Immunohistochemistry	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
611450	Human Endothelial Cell Lysate	500 µg	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Arnott CH, Sale EM, Miller J, Sale GJ. Use of an antisense strategy to dissect the signaling role of protein-tyrosine phosphatase alpha. *J Biol Chem.* 1999; 274(37):26105-26112.(Biology: Western blot)

Longo FM, Martignetti JA, Le Beau JM. Leukocyte common antigen-related receptor-linked tyrosine phosphatase. Regulation of mRNA expression. *J Biol Chem.* 1993; 268(35):26503-26511.(Biology)

Tao J, Malbon CC, Wang HY. Galpha(i2) enhances insulin signaling via suppression of protein-tyrosine phosphatase 1B. *J Biol Chem.* 2001; 276(43):39705-39712.(Biology: Western blot)