



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



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Diagnostik & molekulare Diagnostik



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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# PRODUCT INFORMATION

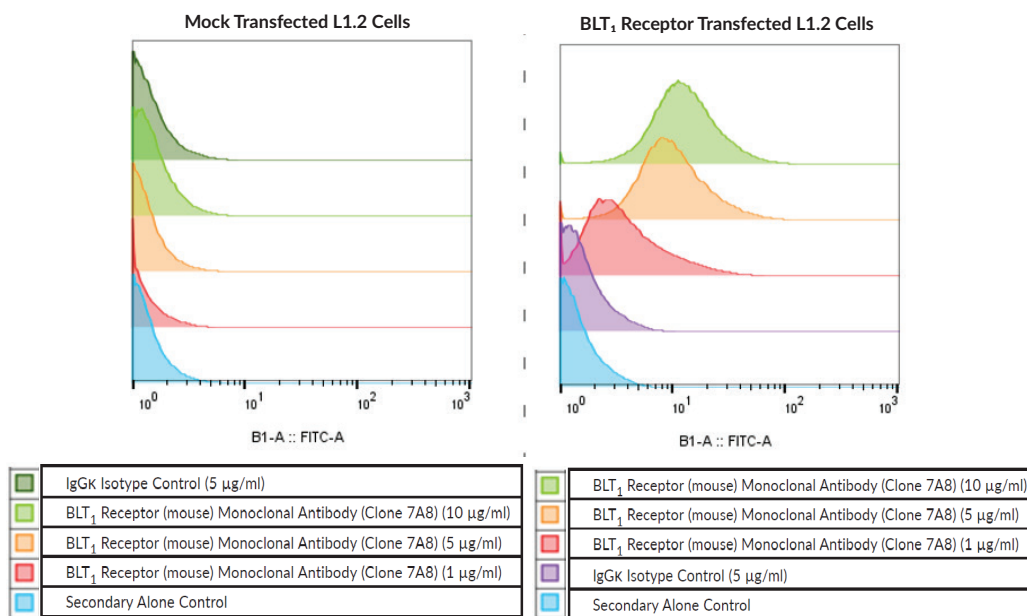


## BLT<sub>1</sub> Receptor (mouse) Monoclonal Antibody (Clone 7A8) Item No. 30455

### Overview and Properties

<b>Contents:</b>	This vial contains 100 µg of protein G-purified monoclonal antibody
<b>Synonyms:</b>	BLTR1, Leukotriene B <sub>4</sub> Receptor 1, LTB <sub>4</sub> Receptor 1
<b>Immunogen:</b>	BLT <sub>1</sub> receptor-expressing cells
<b>Cross Reactivity:</b>	(+) BLT <sub>1</sub>
<b>Species Reactivity:</b>	(+) Mouse; other species not tested
<b>Uniprot No.:</b>	A7VJD3
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	PBS, pH 7.2, containing 50% glycerol and 0.02% sodium azide
<b>Clone:</b>	7A8
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1κ
<b>Application:</b>	Flow cytometry (FC); the recommended starting dilution is 1:100-200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Image



**Flow cytometric analysis of the BLT<sub>1</sub> receptor overexpressed in L1.2 cells.** L1.2 cells were fixed with 3.7% paraformaldehyde and blocked with 1% FBS in 0.1% saponin. Cells were probed with the indicated amounts of BLT<sub>1</sub> Receptor (mouse) Monoclonal Antibody (Clone 7A8) followed by Cayman's Goat Anti-Mouse (IgG+IgM) FITC (Item No. 10006617).

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
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# PRODUCT INFORMATION



## Description

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BLT<sub>1</sub> receptor is a high-affinity G protein-coupled receptor for leukotriene B<sub>4</sub> (LTB<sub>4</sub>) with roles in the pathogenesis of various inflammatory and immune diseases.<sup>1,2</sup> It is expressed in most immune cells, including neutrophils, macrophages, eosinophils, and T cells, as well as certain non-immune cells, such as endothelial cells, fibroblasts, and smooth muscle cells.<sup>1</sup> Binding of LTB<sub>4</sub> to BLT<sub>1</sub> during the onset of inflammation induces early recruitment and activation of neutrophils and inflammatory polarization of macrophages.<sup>1,3</sup> BLT<sub>1</sub> activation also mediates effector T cell recruitment, providing a link between innate and adaptive immunity during T cell-mediated inflammation. Knockdown of *Ltbr41*, the gene encoding BLT<sub>1</sub>, improves glucose tolerance and reduces hyperinsulinemia in a mouse model of high-fat diet-induced obesity.<sup>4</sup> *Ltbr41* knockdown prevents joint immune cell infiltration and the development of arthritis in multiple mouse models of osteoarthritis and rheumatoid arthritis.<sup>5</sup> Loss of *Ltbr41* also increases tumor burden and decreases survival in a mouse model of spontaneous colorectal tumor formation.<sup>6</sup> Cayman's BLT<sub>1</sub> Receptor (mouse) Monoclonal Antibody (Clone 7AB) can be used for flow cytometry (FC).

## References

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1. Tager, A.M. and Luster, A.D. BLT1 and BLT2: The leukotriene B<sub>4</sub> receptors. *Prostaglandins, Leukot. Essent. Fatty Acids* **69(2-3)**, 123-134 (2003).
2. He, R., Chen, Y., and Cai, Q. The role of the LTB<sub>4</sub>-BLT1 axis in health and disease. *Pharmacol. Res.* **158**, 104857 (2020).
3. Yokomizo, T. and Shimizu, T. The leukotriene B<sub>4</sub> receptors BLT1 and BLT2 as potential therapeutic targets. *Immunol. Rev.* **317(1)**, 30-41 (2023).
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5. Miyabe, Y., Miyabe, C., and Luster, A.D. LTB<sub>4</sub> and BLT1 in inflammatory arthritis. *Semin. Immunol.* **33**, (2017).
6. Jala, V.R., Bodduluri, S.R., Satpathy, S.R., *et al.* The yin and yang of leukotriene B<sub>4</sub> mediated inflammation in cancer. *Semin. Immunol.* **33**, (2017).

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