Product Information

BLT_1 Receptor Monoclonal Antibody

Catalog No. 120111 • Lot. No. XXXX

Contents: This vial contains XXX µg of protein-A purified IgG in XXX µl of PBS, pH 7.4, containing 50% glycerol, 0.5 mg/ml BSA, and 0.02% sodium azide

Synonyms: $BLTR_1$; Leukotriene B_4 Receptor 1; LTB_4 Receptor 1

Antigen: HeLa cells transfected with human BLT_1

Host: mouse, clone 7B1

Cross Reactivity: (+) Human BLT_1 receptor; (-) BLT_2, $CysLT_1$, and $CysLT_2$ receptors[1]

Stability: ≥1 year at -20°C

Applications: Flow cytometry, IHC of frozen sections, and ICC at XX µg/ml. BLT_1 antagonism at XX µg/ml with semi-purified receptor preparations. The best working dilution of the antibody may need to be determined empirically for each application. Does not work for western blotting.

The BLT_1 receptor, cloned from HL-60 human leukemia cells, has 352 amino acids and seven putative membrane-spanning domains.[2] The primary structure of the receptor is identical to that of a putative purinoceptor, P2Y7, which binds to micromolar concentrations of ATP.[3] Northern blotting reveals that the BLT_1 receptor is highly expressed in leukocytes, U937 cells, and to a much lower extent in spleen and thymus.[2] Sheep lung membranes have also been identified as a rich source for receptor isolation and purification.[4] A second LTB_4 receptor, BLT_2, has also been cloned and characterized.[5-7]

References

1. Pettersson, A., Boketoft, A., Sabirsh, A., *et al.* First-generation monoclonal antibodies identifying the human leukotriene B_4 receptor-1. *Biochem. Biophys. Res. Commun.* **279**, 520-525 (2000).
2. Yokomizo, T., Izumi, T., Chang, K., *et al.* A G-protein-coupled receptor for leukotriene B_4 that mediates chemotaxis. *Nature* **387**, 620-624 (1997).
3. Akbar, G.K.M., Dasari, V.R., Webb, T.E., *et al.* Molecular cloning of a novel P_2 purinoceptor from human erythroleukemia cells. *J. Biol. Chem.* **271**, 18363-18367 (1996).
4. Votta, B., Keefer, J., and Mong, S. Characterization of the soluble leukotriene B_4 receptor from sheep lung membranes. *Biochem.* J. **270**, 213-218 (1990).
5. Yokomizo, T., Kato, K., Terawaki, K., *et al.* A second leukotriene B_4 receptor, BLT_2: A new therapeutic target in inflammation and immunological disorders. *J. Exp. Med.* **193**, 421-431 (2000).
6. Kamohara, M., Takasaki, J., Matsumoto, M., *et al.* Molecular cloning and characterization of another leukotriene B_4 receptor. *J. Biol. Chem.* **275**, 27000-27004 (2000).
7. Wang, S., Gustafson, E., Pang, L., *et al.* A novel hepatointestinal leukotriene B_4 receptor. *J. Biol. Chem.* **275**, 40686-40694 (2000).

Related Products

BLT_1 Receptor Polyclonal Antiserum - Cat. No. 100019 • BLT_1 Receptor Polyclonal Antibody - Cat. No. 120114 • BLT_2 Receptor Polyclonal Antibody - Cat. No. 120124

Cayman Chemical

Mailing address
1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone
(800) 364-9897
(734) 971-3335

Fax
(734) 971-3640

E-Mail
custserv@caymanchem.com

Web
www.caymanchem.com