

Anti-Human ULBP1 Monoclonal Antibody AUMO2

Antigen: Human ULBP1 (UL16-binding protein 1)

Clone: AUMO2, mouse IgG2a

Catalog Number: AUMO2-100

Specificity: binds: ULBP1

binds not: ULBP2, ULBP3, ULBP4

Epitope: in ULBP1 ectodomain

Applications: Flow cytometry

Size: 100 μ g, 1.0 mg/ml, in 0.1 ml phosphate-buffered saline, pH 7.4 with 0.05%

sodium azide (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).

Usage: In general, for flow cytometry we recommend a final dilution of 10µg mAb/ml

and for ELISA 1-10 µg mAb/ml.

Purification: Protein A affinity chromatography

Storage: Store at 4°C. For long-term storage freezing at -80°C is recommended.

Description: UL16-binding proteins (ULBP) have been discovered in 2001 during a search

for human proteins binding the Human Cytomegalovirus-encoded UL16 glycoprotein [1] and for human homologues of the mouse RAE1 ligands of NKG2D, respectively [2]. ULBP1-4 are cell surface proteins with an MHC class I-like $\alpha 1/\alpha 2$ superdomain that is bound by human NKG2D [1-3]. ULBP1-3 are attached to the cell surface by GPI-anchor [1]. Expression of ULBP1-3 is induced by infection with Human Cytomegalovirus (HCMV) [4]. In vivo expression of ULBP1 is mostly unexplored, except that freshly isolated leukemias have been shown to express ULBP1 [5]. Recent studies document ULBP1 expression on Dendritic Cells and ULBP1 representing a dominating activating NK ligand on mycobacteria-infected macrophages [6,7]. Like other human and mouse NKG2D-ligands, ULBP stimulate tumor immunity in vivo [8].

Conditions: For research use only. Not for use in diagnostic or therapeutic

procedures. BAMOMAB is not responsible for any patent infringements

caused by the use of this product.

Country of Origin: Germany

Literature: 1. Cosman et al. *Immunity* **14**,123-133 (2001).

2. Steinle A et al. Immunogenetics 53, 279-287 (2001).

3. Radaev S et al. Immunity 15,1039-1049 (2001).

4. Welte S et al. Eur J Immunol 33, 194-203 (2003).

5. Salih HR et al. *Blood* **102**, 1389-1396 (2003).

6. Vankayalapati R. et al. *J Immunol* 175:4611-4617 (2005).

7. Schrama D et al. Eur J Immunol 36:65-72 (2006).

8. Sutherland C et al. Blood 108:1313-1319 (2006).

Human cell line 293T stained with AUMO2 (black) or IgG2a isotype (dotted) and anti-

mouse Ig-PE conjugate.