

ULBP3 (YY42): sc-80420

BACKGROUND

The immune system contains genetically encoded subsystems which monitor the extracellular environment in order to eliminate pathogens and resolve abnormal or transformed tissues. Cytomegalovirus UL16 binding proteins, known as ULBPs, are GPI-linked glycoproteins that belong to the extended MHC class I family and are distantly related to MHC class I polypeptide-related sequence B, known as MICB. ULBP and MICB proteins are ligands for the activating receptor NKG2D/DAP10, which causes lymphocyte activation resulting in the secretion of cytokines, such as interferon- γ and tumor cell lysis. The interaction of ULBP or MICB with NKG2D/DAP10 can be blocked by the soluble form of UL16. ULBPs stimulate cytokine and chemokine production from NK cells, CD8 α/β T cells and γ/δ T cells. Soluble forms of ULBPs induce protein tyrosine phosphorylation and activation of the Janus kinase 2, Stat5, extracellular signal-regulated kinase, mitogen-activated protein kinase and phosphatidylinositol 3-kinase (PI 3-kinase)/Akt signal transduction pathways.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ULBP3 (human) mapping to 6q25.1.

SOURCE

ULBP3 (YY42) is a mouse monoclonal antibody raised against BaF/3 cells transfected with ULBP3 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer. Also available azide-free for blocking, sc-80420 L, 100 μ g/0.1 ml.

APPLICATIONS

ULBP3 (YY42) is recommended for detection of ULBP3 of human origin by flow cytometry (1 μ g per 1×10^6 cells); non cross-reactive with ULBP1 or ULBP2.

Suitable for use as control antibody for ULBP3 siRNA (h): sc-43006, ULBP3 shRNA Plasmid (h): sc-43006-SH and ULBP3 shRNA (h) Lentiviral Particles: sc-43006-V.

Molecular Weight of ULBP3: 28 kDa.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.