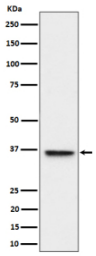
ULBP1 Antibody / UL16-binding protein 1 [clone 30U90] (FY12334)

Catalog No.	Formulation	Size
FY12334	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30U90
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q9BZM6
Applications	Western Blot : 1:500-1:2000
Limitations	This ULBP1 antibody is available for research use only.



Western blot analysis of ULBP1 expression in HeLa cell lysate using ULBP1 antibody. ULBP1 (~28 kDa predicted) seen here at ~36 kDa in Western blot is consistent with its known glycosylation and postâ€•translational modifications.

Description

ULBP1 antibody is designed to detect UL16-binding protein 1, a stress-induced ligand for the NKG2D receptor on natural killer (NK) cells and certain T cells. ULBP1 is a member of the MHC class I-related family of proteins that are not involved in antigen presentation but instead act as activating ligands for immune recognition. Expression of ULBP1 is upregulated

in response to infection, cellular stress, and transformation, making it an important component of immune surveillance.

ULBP1 antibody is widely applied in immunology, cancer biology, and infectious disease research. By detecting ULBP1, researchers can investigate how cells communicate danger signals to the immune system and how tumors or viruses evade recognition. In many cancers, ULBP1 expression is altered, leading to reduced activation of NK cells and impaired immune clearance. Similarly, viruses such as cytomegalovirus encode proteins that bind and inhibit ULBP1, preventing immune detection. ULBP1 antibody enables researchers to study these interactions in detail.

The antibody is suitable for western blotting, immunohistochemistry, flow cytometry, and immunofluorescence. In flow cytometry, ULBP1 antibody detects cell surface expression, allowing quantitative analysis of NKG2D ligand expression on different cell types. Immunohistochemistry provides localization in tissue sections, while immunofluorescence allows colocalization with other markers of stress response or immune activity. These versatile applications support broad investigations of immune recognition pathways.

ULBP1 is particularly important in tumor immunology. Upregulation of ULBP1 on cancer cells should, in principle, trigger immune clearance by NK cells and cytotoxic T lymphocytes. However, many tumors adopt strategies to shed ULBP1 or modulate its expression, thereby escaping immune attack. By employing ULBP1 antibody, researchers can study how these immune evasion strategies develop and assess approaches to restore immune recognition.

Beyond cancer, ULBP1 antibody is relevant to infection biology. Viral immune evasion strategies often involve downregulating or inhibiting stress ligands like ULBP1. Monitoring these changes provides insight into how pathogens adapt to host immune defenses. In autoimmune disease, inappropriate expression of ULBP1 may contribute to immune dysregulation, making it a focus of research into pathological inflammation.

ULBP1 antibody offered by NSJ Bioreagents is a reliable tool for studying immune surveillance and cellular stress signaling. Its proven specificity across platforms ensures accurate detection of this critical NKG2D ligand in diverse biological contexts.

Application Notes

Optimal dilution of the ULBP1 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human ULBP1 was used as the immunogen for the ULBP1 antibody.

Storage

Store the ULBP1 antibody at -20oC.