

ORDERING INFORMATION

Catalog Number: MAB61991

Clone: 628226

Lot Number: CDZR01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

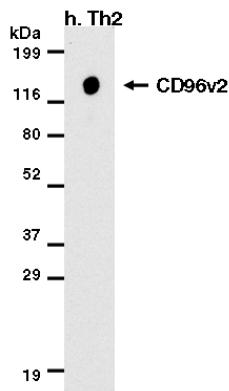
Specificity: human CD96v2

Immunogen: NS0-derived rhCD96v2

Ig class: mouse IgG_{2a}

Recommended Application:
Western blot

Other Application:
Direct ELISA



Detection of human CD96v2 with MAB61991. Lysates were prepared from primary *in vitro* differentiated Th2 cells in non-reducing sample buffer, resolved by SDS-PAGE (30 µg total protein/lane), and transferred to an Immobilon-P membrane. Use of this antibody under reducing conditions is not recommended. The blot was incubated with 2 µg/mL MAB61991 overnight at 4° C and developed using chemiluminescent detection substrate.

Background

CD96 (also known as Tactile) is a 160 kDa type I transmembrane glycoprotein that contains three Ig-like domains in its extracellular region. It is expressed on CD4+ and CD8+ T cells, NK cells, and select B cells. CD96 binds to CD155/PVR and participates in NK cell-mediated lysis of CD155+ target cells. Alternate splicing generates a short variant (CD96v2) which lacks 16 amino acids within the second Ig-like domain. CD96v2 is the predominant isoform in many cell types and exhibits even greater binding affinity with CD155 than does full length CD96. A soluble form of CD96 circulates in the serum. Over aa 22-501, human CD96v2 shares 55% aa sequence identity with mouse and rat CD96.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human CD96v2 (rhCD96v2; aa 1 - 501; Accession # NP_005807). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody detects rhCD96v2 in direct ELISAs and Western blots. In direct ELISAs, this antibody shows no cross-reactivity with rmCD96.

Applications

Western blot - This antibody can be used at 2 µg/mL with the appropriate secondary reagents to detect human CD96v2 in cell or tissue extracts. Refer to <http://www.RnDSystems.com/go/WBCeLLysates> for detailed procedures for preparing lysates and Western blotting. The specific buffers are listed below.

Blotting Buffer

25 mM Tris, pH 7.4
0.15 M NaCl
0.05% Tween® 20

Blocking Solution

5% nonfat dry milk
in Blotting Buffer

Antibody Solution

5% nonfat dry milk
in Blotting Buffer

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human CD96v2. The detection limit for rhCD96v2 is approximately 1 ng/well.

Optimal dilutions should be determined by each laboratory for each application.

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

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