

Anti-HIV gp41 [SAR1]

Catalogue number: 153418

Sub-type:

Images:

Contributor

Inventor: Nigel Dimmock

Institute: University of Warwick

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-HIV gp41 [SAR1]

Alternate name: Env antibody, Glycoprotein 41 antibody, gp41 antibody, Human Immunodeficiency Virus 1 antibody, TM antibody, Transmembrane protein antibody

Class: Monoclonal

Conjugate: Unconjugated

Description: The envelope protein of human immunodeficiency virus type 1 (HIV-1) is synthesized as a gp160 polypeptide that is cleaved to form a non-covalently linked heterodimer; an external gp120 domain and a transmembrane anchoring gp41 domain. The monoclonal antibody SAR1 is a novel IgG that was raised by immunising mice with a plant virus chimera expressing the gp41 tail sequence GERDRDR. SAR1 recognizes gp41 expressed on the surface of infected cells, and binds to some, but not all, preparations of purified virions, suggesting that it may recognize non-infectious virions or degraded/immature forms of the envelope protein. SAR1 actively neutralized virus after it had attached to target cells but had little activity against free virions. Data suggest that SAR1 mediates post-attachment neutralization of virus bound to target cells by inhibiting virus-mediated fusion.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG2a kappa

Reactivity: Virus

Selectivity:

Host: Mouse

Immunogen: Mice were infected with Cowpea mosaic virus-HIV-1 gp41 chimera (30 ?g/ml) expressing

the gp41 C-terminal sequence GERDRDR

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: HIV-1 gp41 tail sequence GERDRDR

Target alternate names:

Target background: The envelope protein of human immunodeficiency virus type 1 (HIV-1) is synthesized as a gp160 polypeptide that is cleaved to form a non-covalently linked heterodimer; an external gp120 domain and a transmembrane anchoring gp41 domain. The monoclonal antibody SAR1 is a novel IgG that was raised by immunising mice with a plant virus chimera expressing the gp41 tail sequence GERDRDR. SAR1 recognizes gp41 expressed on the surface of infected cells, and binds to some, but not all, preparations of purified virions, suggesting that it may recognize non-infectious virions or degraded/immature forms of the envelope protein. SAR1 actively neutralized virus after it had attached to target cells but had little activity against free virions. Data suggest that SAR1 mediates post-attachment neutralization of virus bound to target cells by inhibiting virus-mediated fusion.

Molecular weight:

Ic50:

Applications

Application: ELISA ; Fn ; WB

Application notes:

Handling

Format: Liquid

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: McLain et al. 1993. J Immunol. 150(8 Pt 1):3421-6. PMID: 7682240.

CancerTools.org