



NIH AIDS Reagent Program

20301 Century Boulevard
Building 6, Suite 200
Germantown, MD 20874
USA

Phone: 240 686 4740
Fax: 301 515 4015
aidsreagent.org

DATA SHEET

Reagent:	☒ Anti-SIVmac239 gp41 Hybridoma (4B2)
Catalog Number:	12196
Lot Number:	120051
Release Category:	B
Provided:	6 x 10 ⁶ cells in 1 mL. 93% viability. The antibody (cat# 12224) is also available [LINK] .
Cell Type:	EBV-transformed <i>Macaca mulatta</i> B cell. It has not been fused with any myeloma cell line.
Isotype:	IgG1 lambda
Propagation Medium:	RPMI supplemented with 15% FBS, L-Glut, 1x NEAA, 1x Na/Pyruvate, HEPES and Primocin.
Freeze Medium:	10% DMSO in FBS.
Growth Characteristics:	After thawing the vial and washing the freezing media away, it is advised to seed the cells in 10ml of media in a T75 in the vertical position. Add fresh media when the original media yellows and expand to the desired amount. Cells grow mostly in suspension, with some weakly adhering to the flask. They grow singly with some small clumps. When media yellows, split no higher than 1:4. Under the microscope the cells form small clumps and appear brilliant and round with a few small membrane protrusions.

ALL RECIPIENTS OF THIS MATERIAL MUST COMPLY WITH ALL APPLICABLE BIOLOGICAL, CHEMICAL, AND/OR RADIOCHEMICAL SAFETY STANDARDS INCLUDING SPECIAL PRACTICES, EQUIPMENT, FACILITIES, AND REGULATIONS. NOT FOR USE IN HUMANS.

Description	This hybridoma produces the monoclonal antibody 4B2. 4B2 binds the highly immunogenic region at the beginning of the cytoplasmic tail of SIVmac gp41 (also known as the Kennedy Epitope). It was isolated from a SIVmac239-infected monkey.
Special Characteristics:	<p>Antibody secretion is continuous but is optimal about two weeks after transferring to serum free media (SFM), or when the SFM starts yellowing. The expected antibody yield is >1mg per liter of SFM.</p> <p>The mAb binds the original peptide used for screening (CFSSPPSYFQQTHIQQDPALPTREGKER) and two shorter versions (QQTHIQQDPALPTRE and IQQDPALPTREGKER). The epitope therefore mapped to: IQQDPALPTRE. The epitope overlaps with mAb 6E6 (cat#12223). It doesn't bind by ELISA to recombinant protein SIVmac239 gp120 or gp140 (both lacking the domain responsible for binding) or to any other of the peptides overlapping the whole SIV Env. There is no detectable neutralization for the tested viruses (see cited publication).</p> <p>See also the mAb 6E6 [LINK] and its hybridoma [LINK].</p>
Sterility:	Negative for bacteria, fungi, and mycoplasma.
Recommended Storage:	Liquid nitrogen
Contributor:	Dr. Ronald C. Desrosiers
References:	Evidence against Extracellular Exposure of a Highly Immunogenic Region in the C-Terminal Domain of the Simian Immunodeficiency Virus gp41 Transmembrane Protein. Postler TS, Martinez-Navio JM, Yuste E and Desrosiers RC. J Virol. 2012 Jan;86(2):1145-57. Epub 2011 Nov 9. PMID: 22072749
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