## SANTA CRUZ BIOTECHNOLOGY, INC.

# HIV-2 Nef (4B5): sc-57008



## BACKGROUND

Human immunodeficiency virus (HIV) is a retrovirus that causes acquired immunodeficiency syndrome (AIDS), a fatal disease in humans in which the immune system begins to fail, leading to life-threatening opportunistic infections. HIV mainly infects vital cells in the human immune system such as CD4+ T cells, macrophages and dendritic cells. HIV infection leads to low levels of CD4+ T cells via direct viral killing of infected cells, increased rates of apoptosis in infected cells and by the killing of infected CD4+ T cells by CD8 cytotoxic T cells that recognize the infected cells. Two species of HIV infect humans: HIV-1 and HIV-2. HIV-2 is less transmittable, and it is largely confined to West Africa. The negative factor (Nef) gene, located in the 3' region of the HIV-2 genome, encodes for an N-terminally myristylated protein, likely to be involved in the regulation of viral transcription.

## REFERENCES

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## SOURCE

 $\rm HIV\textsc{-}2$  Nef (4B5) is a rat monoclonal antibody raised against an HIV-2 Nef-TrpE fusion protein.

## PRODUCT

Each vial contains 200  $\mu g$   $lgG_1$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HIV-2 Nef (4B5) is available conjugated to agarose (sc-57008 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-57008 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-57008 PE), fluorescein (sc-57008 FITC), Alexa Fluor<sup>®</sup> 488 (sc-57008 AF488), Alexa Fluor<sup>®</sup> 546 (sc-57008 AF546), Alexa Fluor<sup>®</sup> 594 (sc-57008 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-57008 AF547), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-57008 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-57008 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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#### **APPLICATIONS**

HIV-2 Nef (4B5) is recommended for detection of Nef of HIV-2 origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)]; non cross-reactive with HIV-1.

Molecular Weight of HIV-2 Nef: 27-35 kDa.

#### **STORAGE**

Store at 4° C, \*\*D0 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.