Datasheet: PIP052A

BATCH NUMBER 170720

Description:	RECOMBINANT YELLOW FEVER VIRUS NS1 PROTEIN
Name:	YELLOW FEVER VIRUS
Other names:	YFV
Format:	Rec. Protein
Product Type:	Recombinant Protein
Quantity:	100 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Viral
Product Form	Purified recombinant protein - liquid
Preparation	Recombinant yellow fever virus NS1 protein, sequence strain 17D, expressed in 293 human cells
Buffer Solution	Dulbecco's phosphate buffered saline
Preservative Stabilisers	None present
Approx. Protein Concentrations	Approximate protein concentration 0.48 mg/ml
Specificity	**Recombinant yellow fever virus NS1 protein** is produced as a hexamer in the human 293 cell line. This product has been purified and retains its native folding state and post-translational modifications providing optimal antigenicity. Research indicates that the hexamer is the biologically active form of the NS1 antigen and therefore involved in the

pathogenesis of yellow fever virus (YFV).

Yellow fever virus belongs to the *Flaviviridae* family and like closely related viruses, such as West Nile virus, is an abovirus utilizing various mosquito species as vectors. YFV appears to be restricted naturally to human and other primates but can be experimentally induced in other mammalian species. In recent years an increasing number cases of YFV infection have been reported.

Originating in Africa, YFV has been introduced to tropical regions of South America and periodic outbreaks have historically occurred in both Europe and North America. According to the World Health Organization (WHO), it has been estimated that approximately 200,000 people contract YFV annually with around 30,000 cases resulting in fatality, the majority of these on the African continent.

This product may be used in research to investigate vaccine development (Bonaldo, M.C. *et al.* 2014) or in research into the development of assays to detect YFV infection (Ding, X.X,*et al.* 2014).

Purity	>95% by SDS PAGE analysis
Further Reading	1. Ding, X.X. *et al.* (2014) Development of a Double Antibody Sandwich ELISA for West Nile Virus Detection Using Monoclonal Antibodies against Non-Structural Protein 1. PLoS One 9(10): e108623. 2. Bonaldo, M.C. *et al.* (2014) The yellow fever 17D virus as a platform for new live attenuated vaccines. Hum Vaccin Immunother. 10(5): 1256-65.
Storage	Store at -70°C. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the protein. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10286 available at: https://www.bio-rad-antibodies.com/SDS/PIP052A 10286
Regulatory	For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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