

Product Specification Sheet

P. falciparum Liver-Stage Antigen Peptides

□ **Cat.** LSPF32-P DELFNELLNSVDVNGENILEESQ, P. falciparum Liver-Stage Antigen 3-NRI (LSA3-NRI) peptide
SIZE: 1 mg

Malaria is a mosquito-borne infectious disease caused by a eukaryotic protist of the genus Plasmodium. It is widespread in tropical and subtropical regions, including parts of the Americas, Asia, and Africa. Each year, there are approximately 350–500 million cases of malaria, killing between one and three million people, the majority of whom are young children in sub-Saharan Africa. Malaria parasites are members of the genus Plasmodium (phylum Apicomplexa). In humans malaria is caused by P. falciparum, P. malariae, P. ovale, P. vivax and P. knowlesi. P. falciparum is the most common cause of infection and is responsible for about 80% of all malaria cases, and is also responsible for about 90% of the deaths from malaria. Parasitic Plasmodium species also infect birds, reptiles, monkeys, chimpanzees and rodents. There have been documented human infections with several simian species of malaria, namely P. knowlesi, P. inui, P. cynomolgi, P. simiovale, P. brazilianum, P. schwetzi and P. simium; however, with the exception of P. knowlesi, these are mostly of limited public health importance.

LSPF32-P: This peptide is a fragment of Plasmodium falciparum liver-stage antigen 3 (LSA3), T9-96 clone, a preerythrocytic antigen that induces protection against malaria in chimpanzees. The development of a malaria preerythrocytic vaccine has been greatly influenced by the observation that sterile immunity could be experimentally induced in humans by immunization with Plasmodium falciparum radiation-attenuated sporozoites.

Source of Antigen and Antibodies

Cat#	LSPF32-P
Sequence	DELFNELLNSVDVNGENILEESQ
	H - Asp - Glu - Leu - Phe - Asn - Glu - Leu - Leu - Asn - Ser - Val - Asp - Val - Asn - Gly - Glu - Asn - Ile - Leu - Glu - Glu - Ser - Gln - OH
Mol wt	2620.8
Purity:	>95%

Storage

Short-term: unopened, undiluted liquid vials for less than a week at 4°C.

Long-term: at –20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 12 months at –20°C or below.

Shipping: 4°C for solutions and room temp for powder.

General References: Brahimi, K. et al. *Infect. Immun.* **69**, 3845 (2001); Quakyi, IA. et al. *J. Immunol.* **153**, 2082 (1994); Ahlborg N (200) *68*, 2102-2109; Blackman M (1990) *J. Exp. Med.* **172**, 379-382; Blackman M (1991) *Mol. Biochem. Parasitol.* **49**, 29-34; Bzik DJ (1993) *Mol Biochem. Parasitol.* **59**, 155-156; Vander DL (1981) *Mol Bioche.. Parasitol.* **4**, 255-264; Iqbal J (2004) *J. Clin. Microbiol.* **42**, 4237-4241;

*This product is for in vitro research use only.

Related material available from ADI

Catalog#	ProdDescription
RP-649	Recombinant Malaria Protein HSP
RP-650	Recombinant Malaria Cs Mosaic
SP-88358-1	MSP-1 P2, Malaria Merozoite Surface Peptide – 1
CSPF16-R	Recombinant (E. coli) Circumsporozoite (CSP) mosaic protein (107-129, 334-351 aa) (P.falciparum)
HRPF21-M	Mouse Anti-Histidine rich glycoprotein II (HRP II, P. falciparum) IgG, aff pure #1
HRPF25-R	Recombinant (E. coli) merozoite surface protein-1 (MSP-1; P. falciparum)
MSPF25-R	Recombinant (E. coli) merozoite surface protein-2 (MSP-2; P. falciparum)
MSPV14-M	Mouse Anti-Merozoite surface protein-1 (MSP-1; P. vivax) IgG, aff pure #1
MSPV16-R	Recombinant (E. coli) merozoite surface protein-1 (MSP-1; 108-aa; P. vivax)
MSPV26-R	Recombinant (E. coli) merozoite surface protein-2 (MSP-2; 460-aa; P. vivax)

LSPF32-P

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