

Product Specification Sheet

**P. falciparum Liver-Stage Antigen Peptides**

□ **Cat.** LSPF31-P      LEESQVNDIDIFNSLVKSVQEQQHNV, P. falciparum Liver-Stage Antigen 3-NRII, LSA3-NRII (81-106) 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.

LSPF31-P: This peptide belongs to amino acids 81 to 106 fragment of the Plasmodium falciparum liver-stage antigen 3 (LSA3), T9-96 clone, a preerythrocytic antigen that induces protection against malaria in chimpanzees. The T cells lines derived from infected chimpanzees showed cytolytic activity against LSA3-NRII. The long-term CTL responses were particularly stable for two of LSA3 peptides (LSA3-RE and LSA3-NRII), which were detected even 9 months after the final immunization.

**Source of Antigen and Antibodies**

Cat#	LSPF31-P
Sequence	LEESQVNDIDIFNSLVKSVQEQQHNV
	H - Leu - Glu - Glu - Ser - Gln - Val - Asn - Asp - Asp - Ile - Phe - Asn - Ser - Leu - Val - Lys - Ser - Val - Gln - Gln - Glu - Gln - Gln - His - Asn - Val - OH
Mol wt	3028.3.9
Purity:	>95%

**Storage**

**Short-term:** unopened, undiluted liquid vials for less than a week at 40C.

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

**Stability:** 12 months at –200C or below.

**Shipping:** 40C for solutions and room temp for powder.

**General References:** Istvan, E. and D. Goldberet, J. Biol. Chem. 280, 6890 (2005).; 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)

LSPF31-P

121204A

**India Contact:**

**Life Technologies (India) Pvt. Ltd.**

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444

Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)