

**Peptide Array, Zika Virus, PRVABC59 Envelope Protein Diverse Peptides**

**Catalog No. NR-50554**

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**Product Description:** NR-50554 is a 5-peptide array that represents a region of amino acid sequence diversity in the envelope (E) protein of the PRVABC59 strain of Zika virus (ZIKV). Peptides are 15-mers, with 12 amino acid overlaps. The CDC sequence for ZIKV, PRVABC59 (GenPept: AMC13911) is identical to that of BEI Resources NR-50240 (GenPept: AMZ03556), with the exception of one amino acid, V620L (aa330 of the E protein). A peptide array covering the entire E protein of the CDC sequence (GenPept: AMC13911) can be constructed using these 5 peptides and peptides from BEI Resources NR-50553 (Peptide Array, Zika Virus, PRVABC59 Envelope Protein).

**Lot: P5107-1 to P5107-5**

The following information applies to all peptides:

- Appearance White lyophilized powder
- Mass spectral analysis Correct MW by MALDI-TOF
- Counter Ion Trifluoroacetate

Peptide-specific information is shown in the tables below.

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC <sup>a</sup>	Peptide Content <sup>b</sup>
1 of 5	11/8/2016	15	316-KIPAETLHGTVTVEV-330	1593.85	0.46	85.3%	82.3%
2 of 5	11/8/2016	15	319-AETLHGTVTVEVQYA-333	1617.78	0.42	99.4%	87.6%
3 of 5	11/8/2016	15	322-LHGTVTVEVQYAGTD-336	1589.73	0.39	96.5%	87.5%
4 of 5	11/8/2016	15	325-TVTVEVQYAGTDGPC-339	1539.68	0.42	90.8%	87.1%
5 of 5	11/8/2016	15	328-VEVQYAGTDGPCKVP-342	1562.77	0.37	86.4%	87.3%

<sup>a</sup>% full-length  
<sup>b</sup>Remainder is salt and water

Peptide		Ala (A)	Arg (R)	Asx (N,D)	Cys (C)	Glx (Q,E)	Gly (G)	His (H)	Ile (I)	Leu (L)	Lys (K)	Met (M)	Phe (F)	Pro (P)	Ser (S)	Thr (T)	Trp (W)	Tyr (Y)	Val (V)
1 of 5	Expected	1.00				2.00	1.00	1.00	1.00	1.00	1.00			1.00		3.00			3.00
	Actual	1.10				1.82	0.93	0.97	0.81	1.06	0.83			0.91		2.83			3.00
2 of 5	Expected	2.00				3.00	1.00	1.00		1.00						3.00		1.00	3.00
	Actual	1.85				2.79	1.00	0.95		0.92						2.85		1.01	2.87
3 of 5	Expected	1.00		1.00		2.00	2.00	1.00		1.00						3.00		1.00	3.00
	Actual	0.95		1.04		1.92	1.92	0.99		0.86						2.84		0.98	3.00
4 of 5	Expected	1.00		1.00	1.00	2.00	2.00							1.00		3.00		1.00	3.00
	Actual	0.97		0.87	0.48 <sup>a</sup>	1.88	2.00							0.98		2.83		0.96	3.08
5 of 5	Expected	1.00		1.00	1.00	2.00	2.00				1.00			2.00		1.00		1.00	3.00
	Actual	0.98		0.96	0.37 <sup>a</sup>	2.04	2.00				0.88			1.92		0.91		0.94	2.90

<sup>a</sup>Cys was partially destroyed during hydrolysis

Table 3			
Peptide	Sequence	Solubility	Solvent
1 of 5	316-KIPAETLHGTVTVEV-330	1 mg/mL	Water
2 of 5	319-AETLHGTVTVEVQYA-333	1 mg/mL	100% DMSO
3 of 5	322-LHGTVTVEVQYAGTD-336	1 mg/mL	100% DMSO
4 of 5	325-TVTVEVQYAGTDGPC-339	1 mg/mL	100% DMSO
5 of 5	328-VEVQYAGTDGPCKVP-342	1 mg/mL	70% acetonitrile in water

Date: 13 JAN 2017

Signature: 

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