

Table S2. *TRIM5* genotyping of the 129 rhesus monkeys in the study.

| A. SIVmac251 Challenge (<i>Mamu-A*01-</i>) | | | | <i>TRIM5</i> | | | |
|--|--------|-------------|---------------|---|---------------|---------|----------------|
| ID | Monkey | MHC class I | Exon 8 (SPRY) | | | | |
| | | | G997T/A | Nucleotide deletion (1015-1020: ACGTTT) | TRIM5- Cyp | Alleles | |
| Control | 1 | AR92 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 2 | AR33 | A*01 - | T/T | 2 | N | 6-11/6-11 |
| | 3 | AR10 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 4 | 2B2 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 5 | 1C8 | A*01 - | T/T | 2 | N | 6-11/6-11 |
| | 6 | 3C9 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 7 | OC5 | A*01 - | T/A | 2 | P | 6-11/TRIM5-Cyp |
| | 8 | BC38 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 9 | BB69 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 10 | AP89 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 11 | AR27 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 12 | AP91 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 13 | AP31 | A*01 - | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 14 | AR65 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 15 | AO69 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 16 | 8B2 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 17 | AO46 | A*01 - | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 18 | AP65 | A*01 - | T/T | 2 | N | 6-11/6-11 |
| | 19 | OA6 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 20 | AM64 | A*01 - | T/T | 2 | N | 6-11/6-11 |
| Vaccine | 1 | A500 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 2 | AS33 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 3 | AS15 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 4 | AR70 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 5 | A511 | A*01 - | T/A | 2 | P | 6-11/TRIM5-Cyp |
| | 6 | 9B0 | A*01 - | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 7 | 7B9 | A*01 - | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 8 | AOO7 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 9 | BB80 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 10 | BB75 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 11 | BB61 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 12 | AR59 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 13 | AR60 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 14 | AR01 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 15 | AR36 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 16 | AP57 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 17 | AP08 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 18 | AM74 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 19 | AR30 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 20 | AP03 | A*01 - | G/T | 1 | N | 1-5/6-11 |

| B. SIVsmE660 Challenge (<i>Mamu-A*01-</i>) | | | | <i>TRIM5</i> | | | |
|--|--------|-------------|---------------|---|-----------|---------|---------------------|
| ID | Monkey | MHC class I | Exon 8 (SPRY) | | | | |
| | | | G997T/A | Nucleotide deletion (1015-1020: ACGTTT) | TRIM5-Cyp | Alleles | |
| Control | 1 | ZA40 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 2 | AX73 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 3 | ZB42 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 4 | A4V014 | A*01 - | T/T | 2 | N | 6-11/6-11 |
| | 5 | A4V019 | A*01 - | A/A | 2 | P | TRIM5-Cyp/TRIM5-Cyp |
| | 6 | BC30 | A*01 - | G/A | 1 | P | 1-5/TRIM-Cyp |
| | 7 | A5V045 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 8 | DC1K | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 9 | 05D215 | A*01 - | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 10 | 05D247 | A*01 - | A/A | 2 | P | TRIM5-Cyp/TRIM5-Cyp |
| | 11 | A5V005 | A*01 - | T/T | 2 | N | 6-11/6-11 |
| | 12 | A5V020 | A*01 - | T/A | 2 | P | 6-11/TRIM5-Cyp |
| | 13 | A5V026 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 14 | A5V041 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 15 | A5V043 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 16 | A5V052 | A*01 - | T/A | 2 | P | 6-11/TRIM5-CyP |
| | 17 | A6V029 | A*01 - | T/T | 2 | N | 6-11/6-11 |
| | 18 | A6V034 | A*01 - | T/T | 2 | N | 6-11/6-11 |
| | 19 | A6V035 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 20 | A6V041 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 21 | A6V040 | A*01 - | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 22 | A6V063 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 23 | A5V021 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 24 | A6V098 | A*01 - | T/A | 2 | P | 6-11/TRIM5-Cyp |
| | 25 | A6V005 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| Vaccine | 1 | R26 | A*01 - | T/A | 2 | P | 6-11/TRIM5-Cyp |
| | 2 | 00D338 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 3 | A4V013 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 4 | BB99 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 5 | ZA74 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 6 | 04D089 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 7 | DC86 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 8 | DC82 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 9 | 05D218 | A*01 - | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 10 | DC84 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 11 | X41 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 12 | ZA16 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 13 | ZB08 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 14 | A4V003 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 15 | BB81 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 16 | BC26 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| | 17 | DC0X | A*01 - | G/G | 0 | N | 1-5/1-5 |
| | 18 | DC1M | A*01 - | G/G | 0 | N | 1-5/1-5 |

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|----|------|--------|-----|---|---|-----------|
| 19 | DC1J | A*01 - | G/T | 1 | N | 1-5/6-11 |
| 20 | R05 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| 21 | AY18 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| 22 | ZB06 | A*01 - | G/G | 0 | N | 1-5/1-5 |
| 23 | BB40 | A*01 - | G/T | 1 | N | 1-5/6-11 |
| 24 | BB86 | A*01 - | T/T | 2 | N | 6-11/6-11 |
| 25 | BC28 | A*01 - | G/T | 1 | N | 1-5/6-11 |

| C. SIVsmE660 Challenge (<i>Mamu-A*01+</i>) | | | | TRIM5 | | | |
|--|--------|-------------|---------------|---|-----------|---------|---------------------|
| ID | Monkey | MHC class I | Exon 8 (SPRY) | | | | |
| | | | G997T/A | Nucleotide deletion (1015-1020: ACGTTT) | TRIM5-Cyp | Alleles | |
| Control | 1 | 4252 | A*01 + | T/A | 2 | P | 6-11/TRIM5-Cyp |
| | 2 | ARB0 | A*01 + | T/A | 2 | P | 6-11/TRIM5-Cyp |
| | 3 | AR94 | A*01 + | G/G | 0 | N | 1-5/1-5 |
| | 4 | A027 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 5 | AP54 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 6 | 2B6 | A*01 + | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 7 | 1B5 | A*01 + | G/G | 0 | N | 1-5/1-5 |
| | 8 | 8B1 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 9 | 9B3 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 10 | A6V036 | A*01 + | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 11 | 4B4 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 12 | A6V031 | A*01 + | G/G | 0 | N | 1-5/1-5 |
| | 13 | A523 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 14 | A547 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 15 | AR21 | A*01 + | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 16 | AP37 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 17 | AP62 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 18 | AR02 | A*01 + | G/G | 0 | N | 1-5/1-5 |
| | 19 | AP34 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 20 | ZD57 | A*01 + | G/G | 0 | N | 1-5/1-5 |
| Vaccine | 1 | 4251 | A*01 + | G/G | 0 | N | 1-5/1-5 |
| | 2 | AR81 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 3 | AR96 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 4 | 2C1 | A*01 + | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 5 | BC20 | A*01 + | G/G | 0 | N | 1-5/1-5 |
| | 6 | A6V046 | A*01 + | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 7 | A532 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 8 | AR56 | A*01 + | A/A | 2 | P | TRIM5-Cyp/TRIM5-Cyp |
| | 9 | AP21 | A*01 + | G/G | 0 | N | 1-5/1-5 |
| | 10 | AR44 | A*01 + | G/A | 1 | P | 1-5/TRIM5-Cyp |
| | 11 | AR34 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 12 | AP32 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 13 | AR03 | A*01 + | G/G | 0 | N | 1-5/1-5 |
| | 14 | AP77 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 15 | AR76 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 16 | A018 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 17 | ZD46 | A*01 + | G/T | 1 | N | 1-5/6-11 |
| | 18 | ZD51 | A*01 + | G/G | 0 | N | 1-5/1-5 |
| | 19 | ZD12 | A*01 + | G/G | 0 | N | 1-5/1-5 |