**Table S4**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Virus** | **Clade** | **Residue at amino acid position** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **2** | **36** | **43** | **45** | **53** | **83** | **86** | **120** | **124** | **129** | **133** | **134** | **140** | **141** | **151** | **154** | **155** | **156** | **162** | **163** | **184** | **189** | **219** | **235** | **240** | **269** | **277** | **282** | **310** |
| Vietnam/1203/04 | 1 | **Q** | **K** | **D** | **D** | **R** | **A** | **V** | **S** | **S** | **L** | **S** | **A** | **K** | **S** | **I** | **N** | **S** | **T** | **R** | **S** | **A** | **K** | **V** | **P** | **N** | **L** | **K** | **M** | **R** |
| Anhui/5/05 | 2.3.4 |  | **T** |  |  |  |  | **A** |  | **D** | **S** |  |  | **T** | **P** |  |  | **N** |  |  |  |  |  |  |  |  | **V** |  | **I** | **K** |
| Egypt/N03072/10 | 2.2.1 |  | **T** | **N** |  |  | **I** | **A** |  | **D** | **/** |  | **V** | **R** |  | **T** | **D** | **N** | **A** |  |  |  | **R** |  | **S** |  |  |  | **I** |  |
| Hubei/1/10 | 2.3.2 | **H** | **T** |  | **N** | **K** |  | **A** | **N** | **D** |  | **A** |  |  |  |  | **D** | **N** | **A** | **K** | **G** | **E** | **R** | **I** |  | **H** | **V** | **R** | **I** | **K** |
| Antigenic site |  |  |  |  |  |  |  |  | **Sa** |  |  |  |  | **Ca** | **Ca** |  | **Sa** | **Sa** | **Sa** | **Sa** | **Sa** | **Sb** | **Sb** |  | **Ca** |  |  |  |  |  |

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| **Virus** | **Clade** | **Residue at amino acid position** | | | | | | | | | | | |
| **71** | **94** | **174** | **181** | **200** | **212** | **217** | **226** | **227** | **252** | **263** | **265** |
| Vietnam/1203/2004 | 1 | I | D | V | P | V | R | S | M | E | Y | T | M |
| Anhui/5/2005 | 2.3.4 |  | N | I | S |  | K | S |  | D |  | A | V |
| Egypt/N03072/2010 | 2.2.1 | L | N |  |  |  | K | S |  |  | N |  |  |
| Hubei/1/2010 | 2.3.2 |  | N |  |  | I | K | S | I | D |  |  |  |
| Antigenic site |  | Cb |  |  |  |  |  |  |  |  |  |  |  |