

MEME **found evidence** of  
+ episodic positive/diversifying selection at 9 sites  
with p-value threshold of 0.1.

See [here](#) for more information about the MEME method.  
Please cite [PMID 22807683](#) if you use this result in a publication, presentation, or other scientific work.

MEME Table i

Sites that yielded a statistically significant result are highlighted in green.

Showing entries 1 through 20 out of 288.

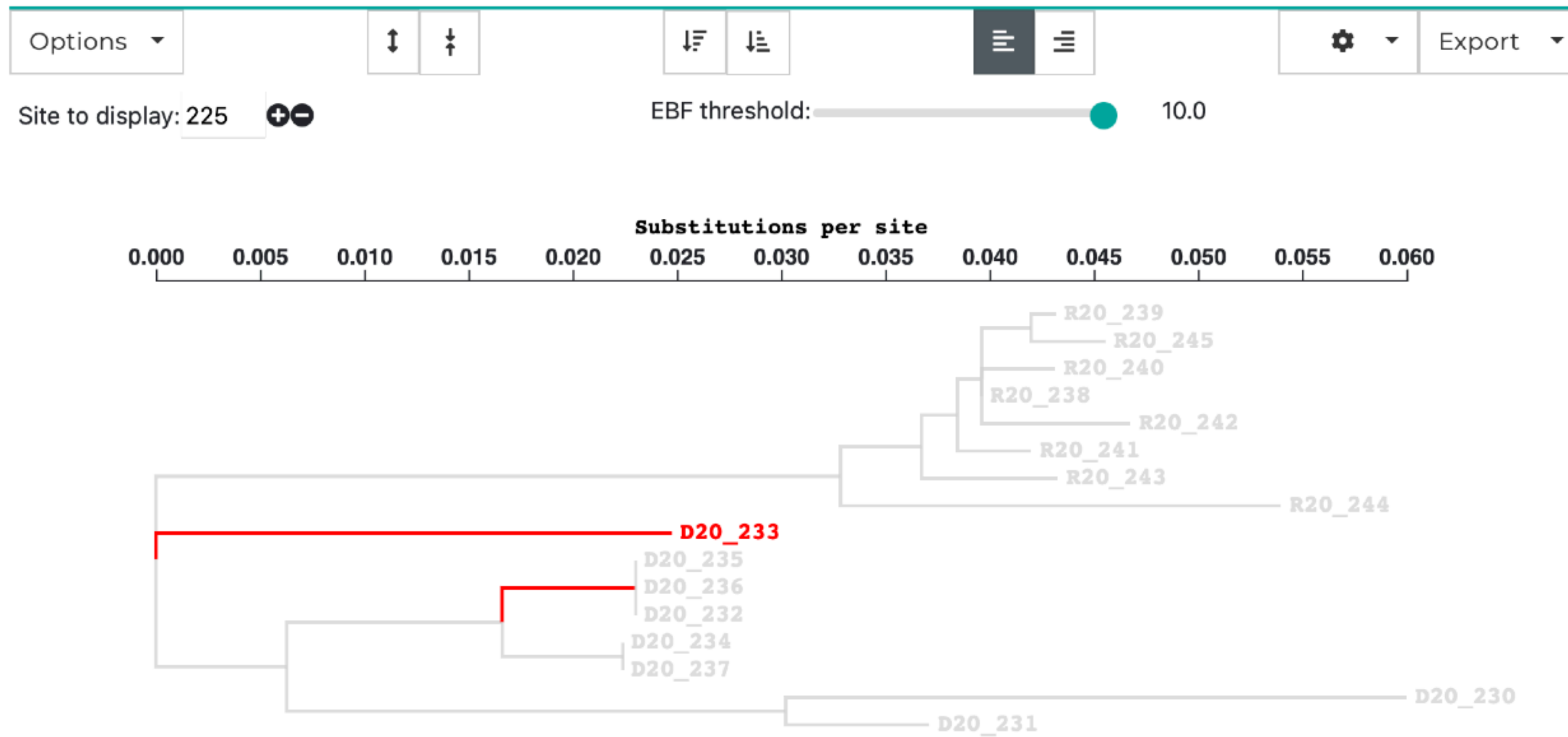
 **Export Table to CSV**

<< < > >>

| Site<br>↕ | Partition<br>↕ | $\alpha$<br>↕ | $\beta^-$ ↕ | $p^-$ ↕ | $\beta^+$ ↕ | $p^+$ ↕ | LRT ↕ | p-value<br>⌵ | # branches<br>under selection<br>↕ | Total branch<br>length ↕ | MEME<br>LogL ↕ | FEL<br>LogL<br>↕ |
|-----------|----------------|---------------|-------------|---------|-------------|---------|-------|--------------|------------------------------------|--------------------------|----------------|------------------|
| 161       | 1              | 0.00          | 0.00        | 0.82    | 114.39      | 0.18    | 7.58  | 0.01         | 0.00                               | 0.00                     | -16.57         | -14.14           |
| 19        | 1              | 0.00          | 0.00        | 0.95    | 2106.40     | 0.05    | 6.61  | 0.02         | 0.00                               | 0.00                     | -14.85         | -11.57           |
| 274       | 1              | 2.77          | 2.77        | 0.95    | 10000.00    | 0.05    | 4.98  | 0.04         | 1.00                               | 0.00                     | -20.16         | -17.67           |
| 165       | 1              | 0.00          | 0.00        | 0.78    | 52.90       | 0.22    | 4.25  | 0.06         | 0.00                               | 0.00                     | -15.51         | -14.44           |
| 225       | 1              | 0.00          | 0.00        | 0.74    | 43.93       | 0.26    | 3.71  | 0.07         | 2.00                               | 0.00                     | -13.87         | -13.06           |
| 264       | 1              | 0.00          | 0.00        | 0.90    | 176.76      | 0.10    | 3.64  | 0.08         | 0.00                               | 0.00                     | -11.73         | -10.17           |
| 282       | 1              | 0.00          | 0.00        | 0.00    | 8.19        | 1.00    | 3.65  | 0.08         | 0.00                               | 0.00                     | -19.33         | -19.32           |
| 272       | 1              | 0.00          | 0.00        | 0.85    | 38.49       | 0.15    | 3.33  | 0.09         | 1.00                               | 0.00                     | -10.45         | -9.37            |

```
hyphy meme --alignment HIV-sets.fas
```

## Fitted tree



- Where in the tree is there evidence for selection?
- Can use exploratory Empirical Bayes Factor analysis to find “hotspots”
- Not a “strict” statistical test!