Table S4. TP53 mutation dataset used for assessing PROVEAN performance.

|  |  |  |  |
| --- | --- | --- | --- |
| Class | # of substitutions | Median activity level | Binary class used for PROVEAN assessment |
| Supertrans (Increased activity) | 85 | > 140 | neutral |
| Functional | 1154 | > 75 and <= 140 | neutral |
| Partially functional | 582 | >20 and <=75 | neutral |
| Non-functional | 493 | <= 20 | deleterious |
| Total | 2314 |   |   |

Note: TP53 mutation dataset originally produced by Kato et al. [1].

**Reference**

1. Kato S, Han SY, Liu W, Otsuka K, Shibata H, et al. (2003) Understanding the function-structure and function-mutation relationships of p53 tumor suppressor protein by high-resolution missense mutation analysis. Proc Natl Acad Sci U S A 100: 8424-8429.