

| NUCLEOTIDE POSITION | DOMAIN | REFERENCE K-MER | VARIATION | CLASS | AMINO ACID CHANGE | MUTATIONAL SCORE | DISCRIMINATIVE SCORE | PROTEIN SCORE | K-MER SIGNIFICANCE SCORE |
|---------------------|--------|---|--------------|------------------------------|-------------------|------------------|----------------------|---------------|--------------------------|
| 28 | NTD | AACCGCAGT (99%) / Towne (30%) | ---CGCAAC | Toledo (91%) | N10- | 5 | 5 | 4 | 4.7 |
| | | | | | S12N | 2 | | | |
| | | | CGCAACAAAC | AD169 (93%) | N10R | 3 | | | |
| | | | | | R11N | 3 | | | |
| | | | | | S12N | 2 | | | |
| | | | ATCCGCAAT | C5 (100%) | N10I | 5 | | | |
| | | | | | S12N | 2 | | | |
| 37 | NTD | ACCGATACT (98%) | AATCGCAGT | Towne (70%) | Silent | 0 | 5 | 4 | 4.7 |
| | | | ACCACTACT | Towne (100%) | D14S | 3 | | | |
| | | | ACTCCT--- | AD169 (94%) | D14- | 5 | | | |
| | | | | | T15P | 2 | | | |
| | | | ACCACTACT | Toledo (100%) | D14T | 3 | | | |
| | | | ACCAGCACCC | C5 (100%) | D14S | 3 | | | |
| | | | AACAGCACCC | C5 (100%) | I20S | 4 | | | |
| 55 | NTD | AACATCACC (98%) | AACAGTACC | Towne (100%) | I20S | 4 | 5 | 4 | 4.7 |
| | | | AATGACACT | AD169 (100%) / Toledo (100%) | I20D | 5 | | | |
| | | | ACGGGGCCG | Toledo (98%) | E26G | 3 | | | |
| | | | ACGGAGACG | Towne (26%) | P27T | 2 | | | |
| 73 | NTD | ACGGAGCCG (99%) / Towne (74%) | ACGGGGCCG | AD169 (99%) | E26G | 3 | 5 | 4 | 4.0 |
| | | | ACTGAGCCG | C5 (100%) | Silent | 0 | | | |
| | | | CTATTCGCC | AD169 (100%) | S29F | 5 | | | |
| | | | CTGTTCGCC | C5 (100%) / Toledo (99%) | S29F | 5 | | | |
| 442 | TM4 | TATATAATT (100%) / Towne (98%) | TATACAATT | Toledo (99%) | I149T | 4 | 5 | 4 | 4.3 |
| | | | TATATGATT | AD169 (89%) | I149M | 1 | | | |
| | | | TACATAGTT | C5 (100%) | I150V | 2 | | | |
| | | | TTGACGCTG | C5 (100%) | L152T | 4 | | | |
| 451 | TM4 | TTGCTATTG (99%) / AD169 (100%) / Towne (100%) | TTGATATTG | Toledo (99%) | L152I | 1 | 4 | 4 | 4.0 |
| 523 | ECD2 | AATGGTACA (99%) / Towne (100%) | CACGATGCC | AD169 (98%) | N175H | 3 | 5 | 4 | 4.3 |
| | | | | | G176D | 3 | | | |
| | | | | | T177A | 2 | | | |
| | | | CACGAAGCT | C5 (89%) | N175H | 3 | | | |
| | | | | | G176E | 4 | | | |
| | | | | | T177A | 2 | | | |
| | | | CATGAAGCC | Toledo (100%) | N175H | 3 | | | |
| | | | | | G176E | 4 | | | |
| | | | | | T177A | 2 | | | |
| | | | | | G179D | 3 | | | |
| 532 | ECD2 | AATGGACAA (99%) | AATGATATCAAT | C5 (89%) | Q180N | 2 | 5 | 4 | 4.7 |
| | | | | | -180I | 5 | | | |
| | | | | | N178D | 1 | | | |
| | | | GAT---GAA | Towne (66%) | G179- | 5 | | | |
| | | | | | Q180E | 2 | | | |
| | | | | | G179D | 3 | | | |
| | | | AACGATACCAAT | AD169 (95%) | Q180N | 2 | | | |
| | | | | | -180T | 5 | | | |
| | | | | | N178D | 1 | | | |
| | | | GAT---GAG | Towne (30%) | G179- | 5 | | | |
| | | | | | Q180E | 2 | | | |
| | | | | | G179D | 3 | | | |
| | | | AATGATACCACT | Toledo (92%) | -180T | 5 | | | |
| | | | | | Q180T | 2 | | | |
| | | | | | S181N | 2 | | | |
| 541 | ECD2 | AGTAGCAAT (99%) | ACTAATGCCACT | Toledo (99%) | S182A | 1 | 5 | 4 | 4.7 |
| | | | | | N183T | 3 | | | |
| | | | | | S181N | 2 | | | |
| | | | AATACCAAC | C5 (100%) | S182T | 2 | | | |
| | | | | | S181N | 2 | | | |
| | | | AATACCAAT | Towne (100%) | S182T | 2 | | | |
| | | | | | S181N | 2 | | | |
| | | | AATACTAAT | AD169 (98%) | S182T | 2 | | | |
| 586 | ECD2 | GAGGTGTAC (100%) / Towne (98%) | GAGGTGCAC | Toledo (97%) | Y198H | 4 | 5 | 4 | 4.3 |
| | | | GAGGTCTCT | C5 (78%) | Y198S | 4 | | | |
| | | | GAAGTGCAC | AD169 (100%) | Y198H | 4 | | | |
| | | | AAATGTGAA | Toledo (26%) | D277K | 3 | | | |
| 829 | ECD3 | GACTGCGAA (100%) / Towne (100%) | GACTGCAGA | C5 (78%) | E279R | 3 | 5 | 4 | 4.0 |
| | | | GAATGTAAA | Toledo (74%) | D277E | 2 | | | |
| | | | CAGTGTGAA | AD169 (100%) | E279K | 2 | | | |
| | | | | | D277Q | 3 | | | |