**Table S4**. Full list of HERVs in the EnHERV database.

| **Superfamily** | **Family** | **Name/Group** |
| --- | --- | --- |
| **1. ERV1** | ERV9 | HERV9, LTR12, LTR12B, LTR12C, LTR12D, LTR12E, LTR12F |
| HERV1 | HERV1\_I, HERV1\_LTRa, HERV1\_LTRb, HERV1\_LTRc, HERV1\_LTRd, HERV1\_LTRe |
| HERV15 | HERV15, LTR15 |
| HERV17 | HERV17, LTR17 |
| HERV23 | LTR23, LTR44, LTR56 |
| HERV3 | HERV3, LTR4 |
| HERV30 | HERV30, LTR30 |
| HERV35 | HERV35I, LTR35, LTR35A, LTR35B |
| HERV38 | LTR38, LTR38B, LTR38C |
| HERV39 | LTR39 |
| HERV4 | HERV4\_I |
| HERV43 | LTR43, LTR43B |
| HERV45 | LTR45, LTR45B, LTR45C |
| HERV46 | LTR46 |
| HERV49 | LTR49 |
| HERV70 | LTR70 |
| HERVE | HERVE, HERVE\_a |
| HERVFc1 | HERVFc1, HERVFc1\_LTR1, HERVFc1\_LTR2, HERVFc1\_LTR3 |
| HERVFc2 | HERVFc2 |
| HERVFH19 | HERVFH19 |
| HERVFH21 | HERVFH21, LTR21A, LTR21B |
| HERVH | HERVH, LTR7, LTR7A, LTR7B, LTR7C, LTR7Y |
| HERVH48 | HERVH48, MER48 |
| HERVI | HERVI, LTR10A, LTR10B, LTR10B1, LTR10C, LTR10D, LTR10E, LTR10G |
| HERVIP10 | HERVIP10F, HERVIP10FH, LTR10F |
| HERVP71A | HERVP71A, LTR71A, LTR71B |
| HERVS71 | HERVS71, LTR6A, LTR6B |
| Harlequin/HERVW | Harlequin\_I, LTR2, LTR2B, LTR2C |
| HUERSP1 | HUERSP1, LTR8, LTR8A |
| HUERSP2 | HUERSP2, LTR1, LTR1B, LTR1C, LTR1D |
| HUERSP3 | HUERSP3, HUERSP3b, LTR9, LTR9B |
| LOR1 | LOR1, LOR1a, LOR1b, LTR26, LTR26B, LTR26E |
| LTR19 | LTR19, LTR19A, LTR19B, LTR19C |
| LTR24 | LTR24, LTR24B, LTR24C |
| LTR25 | LTR25 |
| LTR27 | LTR27, LTR27B |
| LTR28 | LTR28 |
| LTR29 | LTR29 |
| LTR31 | LTR31 |
| LTR34 | LTR34 |
| LTR36 | LTR36 |
| LTR37 | LTR37A, LTR37B |
| LTR48 | LTR48, LTR48B |
| LTR51 | LTR51 |
| LTR54 | LTR54, LTR54B |

| **Superfamily** | **Family** | **Name/Group** |
| --- | --- | --- |
| **1. ERV1 (cont.)** | LTR58 | LTR58 |
| LTR59 | LTR59 |
| LTR60 | LTR60 |
| LTR61 | LTR61 |
| LTR64 | LTR64 |
| LTR65 | LTR65 |
| LTR68 | LTR68 |
| LTR72 | LTR72, LTR72B |
| LTR75\_1 | LTR75\_1 |
| LTR76 | LTR76 |
| LTR77 | LTR77 |
| LTR78 | LTR78, LTR78B |
| MER101 | MER101, MER101B |
| MER110 | MER110, MER110A |
| MER31 | MER31, MER31A, MER31B |
| MER34 | MER34, MER34A, MER34A1, MER34B, MER34C, MER34C2, MER34D |
| MER39 | MER39, MER39B |
| MER4 | MER4, MER4A, MER4A1, MER4B, MER4C, MER4D, MER4D0, MER4D1, MER4E, MER4E1 |
| MER41 | MER41, MER41A, MER41B, MER41C, MER41D, MER41E, MER41G |
| MER49 | MER49 |
| MER50 | MER50, MER50B, MER50C |
| MER51 | MER51, MER51A, MER51B, MER51C, MER51D, MER51E |
| MER52 | MER52, MER52A, MER52C, MER52D |
| MER57 | MER57, MER57A, MER57A1, MER57B1, MER57B2, MER57C1, MER57C2, MER57D, MER57E1, MER57E2, MER57E3, MER57F |
| MER61 | MER61, MER61A, MER61B, MER61C, MER61D, MER61E, MER61F |
| MER65 | MER65, MER65A, MER65B, MER65C, MER65D |
| MER66 | LTR73, MER66, MER66A, MER66B, MER66C, MER66D |
| MER67 | MER67A, MER67B, MER67C, MER67D |
| MER72 | MER72, MER72B |
| MER83 | MER83, MER83A, MER83B, MER83C |
| MER84 | MER84 |
| MER87 | MER87, MER87B |
| MER89 | MER89 |
| MER90 | MER90a |
| MER92 | MER92A, MER92B |
| PAB | PABL\_A, PABL\_B |
| PRIMA4 | PRIMA4, PRIMAX |
| PRIMA41 | PRIMA41 |
| PrimLTR79 | PrimLTR79 |
|   |  |  |
| **Superfamily** | **Family** | **Name/Group** |
| **2. ERVK** | HERVK10/HERVK (HML-2) | LTR5, LTR5\_Hs, LTR5A, LTR5B, HERVK |
| HERVK14/HERVK (HML-1) | HERVK14, HERVK14C, LTR14, LTR14A, LTR14B, LTR14C |
| HERVK9/HERVK (HML-3) | HERVK9, MER9a1, MER9a2, MER9a3, MER9B |
| HERVK13/HERVK (HML-4) | HERVK13, LTR13, LTR13A |
| HERVK22/HERVK (HML-5) | HERVK22, LTR22, LTR22A, LTR22B, LTR22C |
| HERVK3/HERVK (HML-6) | HERVK3, LTR3, LTR3A, LTR3B |
| HERVK11D/HERVK (HML-7) | HERVK11D, MER11D |
| HERVK11/HERVK (HML-8) | HERVK11, MER11A, MER11B, MER11C |
| HERVKC4/HERVK (HML-10) | HERVKC4 |
| **3. ERVL** | ERV3-16A3 | ERV3-16A3 |
| ERVL | ERVL, ERVLB4, ERVLE, HERVL, MLT2A1, MLT2A2, MLT2B1, MLT2B2, MLT2B3, MLT2B4, MLT2B5, MLT2C1, MLT2C2, MLT2D, MLT2E, MLT2F |
| HERV16 | HERV16, LTR16A, LTR16A1, LTR16A2, LTR16B, LTR16B1, LTR16B2, LTR16C, LTR16D, LTR16D1, LTR16D2, LTR16E1, LRE16E2 |
| HERV18 | HERVL18, LTR18A, LTR18B |
| HERV32 | HERVL32, LTR32 |
| HERV47 | LTR47A, LTR47B |
| HERVL33 | LTR33, LTR33A, LTR33B, LTR33C, LTR41, LTR41B |
| HERVL40 | HERVL40, LTR40a, LTR40A1, LTR40b, LTR40c |
| HERVL42 | LTR42 |
| HERVL50 | LTR50 |
| HERVL52 | LTR52 |
| HERVL53 | LTR53, MER88 |
| HERVL54 | MER54A, MER54B |
| HERVL57 | LTR57 |
| HERVL66 | HERVL66, LTR66 |
| HERVL67 | LTR67B |
| HERVL68 | MER68, MER68B |
| HERVL69 | LTR69 |
| HERVL70 | MER70, MER70A, MER70B, MER70C |
| HERVL73 | MER73 |
| HERVL74 | HERVL74, MER74A, MER74B, MER74C |
| HERVL75 | LTR75, LTR75B |
| LTR62 | LTR62 |
| LTR79 | LTR79 |
| LTR80 | LTR80A, LTR80B |
| LTR82 | LTR82A, LTR82B |
| LTR83 | LTR83 |

| **Superfamily** | **Family** | **Name/Group** |
| --- | --- | --- |
| **3. ERVL (cont.)** | LTR84 | LTR84a, LTR84b |
| LTR86 | LTR86A1, LTR86A2, LTR86B1, LTR86B2, LTR86C |
| MER21 | MER21, MER21A, MER21B, MER21C |
| MER76 | MER76 |
| MER77 | MER77, MER77B |
| **4. ERVL-MaLR** | MLT1 | MLT1, MLT1A, MLT1A0, MLT1A1, MLT1B, MLT1C, MLT1D, MLT1E, MLT1E1, MLT1E1A, MLT1E2, MLT1E3, MLT1F, MLT1F1, MLT1F2, MLT1G, MLT1G1, MLT1G3, MLT1H, MLT1H1, MLT1H2, MLT1I, MLT1J, MLT1J1, MLT1J2, MLT1K, MLT1L, MLT1M, MLT1N2 |
| MST | MST, MSTA, MSTB, MSTB1, MSTB2, MSTC, MSTD |
| THE1 | MLT, THE1, THE1A, THE1B, THE1C, THE1D |