

A**Fig. S7****68% identity**

FAAH 476 GGCCTGCTCTATGGCGTCCCTGTGAGCCTCAAGGAGTGCTTCACCTACAAGGGCCAGGAC
 ||||| ||||| ||||| ||||| ||||| ||||| || || | || ||||| |||

FAAH-OUT 1363 GGCCTTCTCTATGGGGTCCCCATGAGCCTCAAGGACACCTATGACAGCATGGGCCATGAC

FAAH 536 TC--CACGC----TGGGCTTGAGCCTGAATGAAGGGGTGCCGGCGGAGTGCACAGCGTA
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 1423 TGTGCATGCCGCCTGGCCTAGTTCTGGA-GAAGCC-TGC-GACCAAG---GACGGGGTC

FAAH 590 GTGGTGCATGTGCTGAAGCTGCAGGGTGCCGTGCCCTTCGTGCACACCAATGTTCCACAG
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 1477 ATTATGAAAGTGCTCAAGGCCAAGGAGCCATCCCCTTTGTTAAGACCAACATCCCCTG

FAAH 650 TCCATGTTTCACTATGACTGCAGTAACCCCC-TCTTTGGCCAGACCGTGAACCCATGGAA
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 1537 ACGCTGCTCAGCTTTGAATGCGGCAACTCCCCTCTATGGCCAGATGTTGAGCCCCTGAA

FAAH 709 GTCCTCCAAAAGCCCAG--GGGGCTCCT**CAGGGG**GTGAAGGGGCCCTCATCGGGTCTGGA
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 1597 CT--TAAAGAAGACATGTGGGGCTCCT**CAGGGG**GTGA-GGGGCTCTGCTGGCAGAAAGG

FAAH 767 GGCTCCCCCTGGGCTTAGGCACTGATATCGGAGGCAGCATCCGCTTCCCCTCCTCCTTC
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 1654 GGGTCCATCCTAGGCATGGGTACTGACACAGGTGACAGCATCTGCATACCAGCCAGCTTC

FAAH 827 TGCGGCATCTGCGGCCTCAAGCCCACAGGGAACCGCCTCAGCAAGAGTGGCCTGAAGGGC
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 1714 TGTGGTGTTTATGGCCTCTGGACCACAGGTTCCCGCCTCAGCTACACTGGAATT---GCC

FAAH 887 TGTG---TCTATGG-ACAGGAGGCAGTGCCTCTCTCCGTGG---GCCCATGGCCCCGGA
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 1771 TCTGCCATCAAGGGGAAAAAATCGGTGAC---CACGGTGGCTGGCCCCATGGCCCCAGGA

FAAH 940 CGTGGAGAGCCTGGCACTGTGCCTGCGAGCCCTGCTGTGCGAGGACATGTTCCGCTTGGA
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 1828 CGTGGAGAGCCTGGCGCTGTGCCTGCAAGCCCTGCTGAGTGAAGACATGTACCGACTGGA

FAAH 1000 CCCC**CTGTGC**CTCCCTTGCCCTTCAGAGAAGAGGT
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 1888 CCCC**CTGTGC**TCCAGATGCCCTTTAGGGAGGAGGT

71% identity

FAAH 1568 CTGTACAACCTGCCTGGACTTCCCTGCAGGGGTGGTGCCTGTCCACCGGTGACTGCTGAG
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 2216 CTGTACAACCTCCTGGACTTCCCGCGGGCGTGGTGCCTGTCACTATCGTGACACTACAG

FAAH 1628 GACGAGGCCCAGATGGAACATTACAGGGGCTACTTTGGGGATA--TCTGGGACAAGATGC
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 2276 GACGAGGAGGAACCTGGCCTTCTACAAGGGGTGCTACGGAGATAGTTCTGACAAAAATTC

FAAH 1686 TGCAGAAGGGCATGAAGAAGA-GTGTGGGGCTGCCGGTGGCCGTGCAGTGTGTGGCTCTG
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 2336 T-CAGA--GGCGTAAGAGGATCCGTCCGACTTCTGGTACTGTGCAGTGCATTGCTTTG

FAAH 1745 CCCTGGCAAGAAGAGTTGTGTCTGCGGTTTCATGCGGGAGGTGGA
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FAAH-OUT 2393 CCATGGGAAGAGGAGCTGTGTCTCCGGTTTCATGAAGGAGGTGGA