

Supplementary Figures

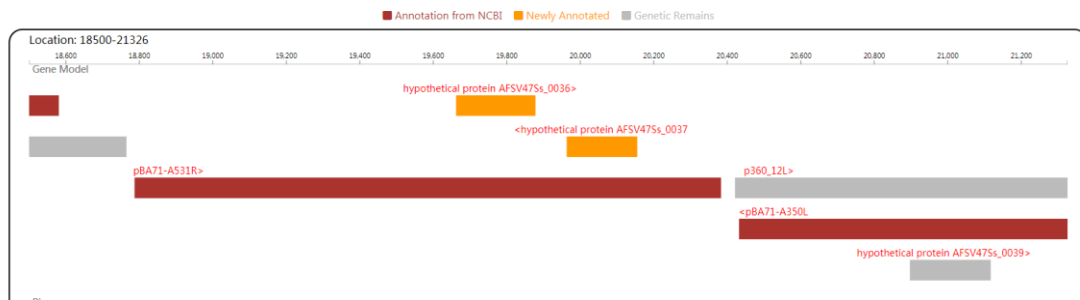
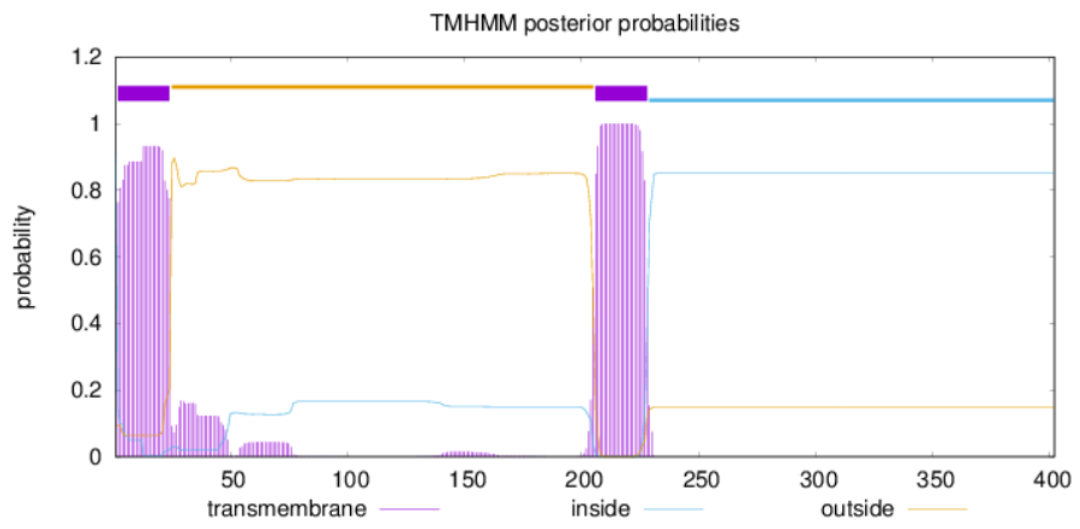
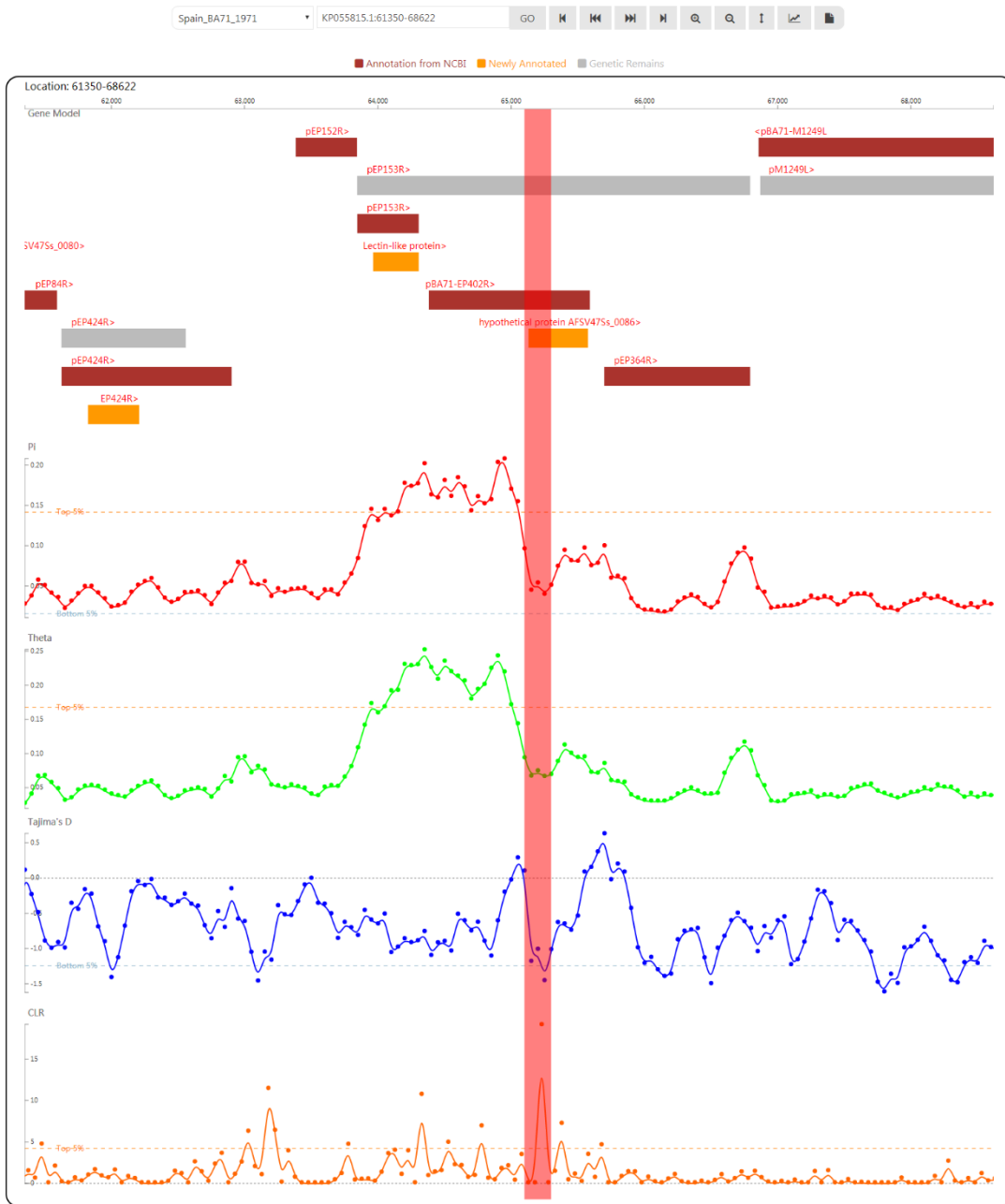


Figure S1. A snapshot displaying the inclusion of alternative splicing cases in ASFVdb. As shown in the figure, 'pBA71-A531R', coloured in red, is possibly transcribed in the forms of "hypothetical protein AFSV47Ss_0036" and "hypothetical protein AFSV47Ss_0037", coloured in orange.

A



B



C

Orthologous in Strains

Strain	Availability	Status	Gene
Spain_BA71_1971	✓	Protein	AKO62740.1
China_AnhuiXCGQ_2018	✗		
China_ASFV-SY18_2018	✗		
Poland_Pol16_20186_o7_2016-2017	✗		
Poland_Pol16_20538_o9_2016-2017	✗		
Poland_Pol16_20540_o10_2016-2017	✗		
Poland_Pol16_29413_o23_2016-2017	✗		
Poland_Pol17_03029_C201_2016-2017	✗		
Poland_Pol17_04461_C210_2016-2017	✗		
Poland_Pol17_05838_C220_2016-2017	✗		
Poland_ASFV_POL_Podlaskie_2015	✗		
Uganda_R8_2015	✗		
Uganda_R7_2015	✗		
Uganda_R25_2015	✗		
Uganda_N10_2015	✗		
Uganda_R35_2015	✗		
Estonia_2014	✗		
Italy_26544_OG10_2010	✓	Protein	AJZ77076.1
Italy_47_Ss_2008_2008	✓	Protein	AOO54390.1
Portugal_OURT_88.3_1988	✓	Protein	CAN10406.1
Spain_E75_1975	✓	Protein	CBH29159.1
Russia_Georgia_2007	✗		
Kenya_Tk1_2005	✗		
Kenya_Bus_2006	✗		
Russia_Odintsovo_2014	✗		
Portugal_L60_1960	✗		
Portugal_NHV_1968	✓	Protein	AIY22408.1
Russia_Kashino_2013	✗		
Benin_1997	✓	Protein Protein	CAN10158.1 CAN10158.1
South_Africa_KNP_Pretorisuskop_1996	✗		
South_Africa_MGR_Mkuzi_1979	✓	Protein	AIY22249.1
Malawi_Lil_1983	✗		
Kenya_1950	✗		
Namibia_Warthog_1980	✓	Protein	QGM12720.1
South_Africa_Warmbaths_1987	✗		
Malawi_Tengani_1962	✗		
China_HLJ_2018	✗		
China_LN_2018	✗		
China_wbBS01_2018	✗		
Ukraine_Kyiv_2014	✗		
Belgium_Etalle_wb_2018	✗		
Lithuania_LT14_2014	✗		
South_Africa_1985	✗		
South_Africa_2_2008	✗		
Zambia_LIV_1983	✗		

D

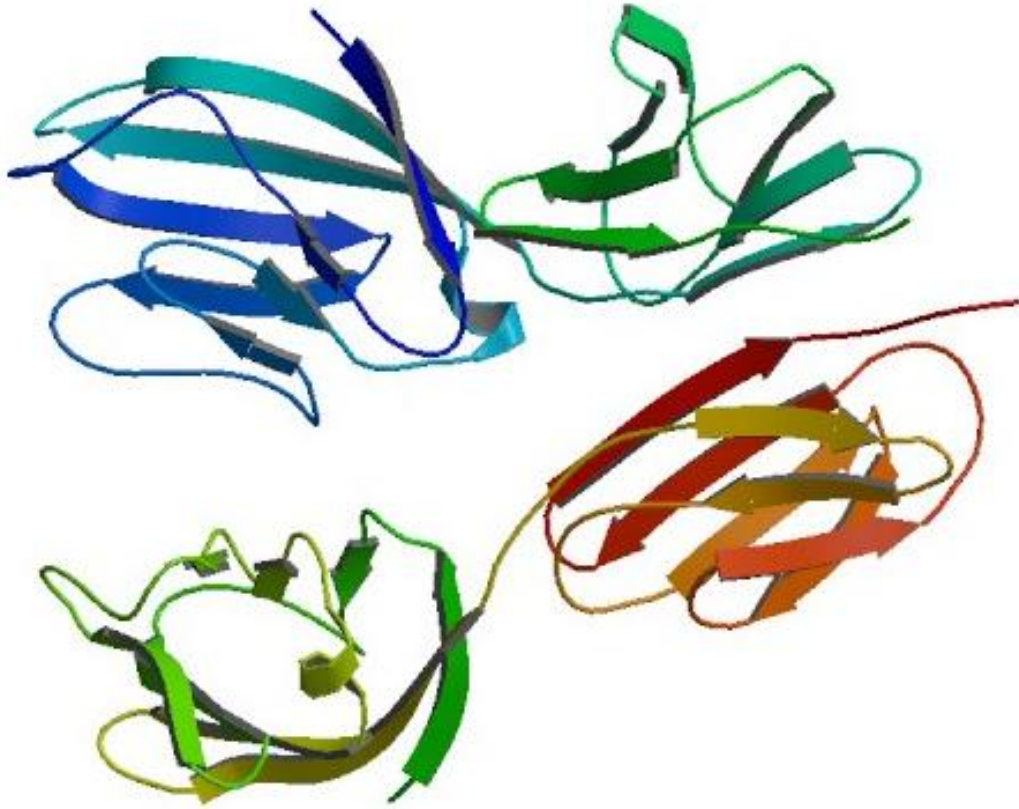


Figure S2. Analysis results of EP402R in ASFVdb. A shows the transmembrane prediction of EP402R in Spain_BA71_1971. B shows the population test statistic results for Spain_BA71_1971, where the red bar marks the region with a Tajima's D valley and a CLR peak in EP402R. C shows the representation of EP402R in different strains. D shows the 3D structure of the cell adhesion molecule CD2 from the PDB, which is similar to EP402R (E-value<0.05).