

Supplementary Table 4. Information and protein analysis of *A. caudatus*

Gene name	Rename	Number of amino acids	Molecular weight	Theoretical pI	Instability index	Aliphatic index	GRAVY	Subcellular localization
Amacr01g04540	AcrPP2C1	476	52275.69	5.12	53.66	75.78	-0.347	chlo
Amacr01g04550	AcrPP2C2	440	48356.41	8.31	55.38	79.52	-0.173	chlo
Amacr01g04570	AcrPP2C3	205	22678.15	4.49	50.8	82.68	-0.372	chlo
Amacr01g06480	AcrPP2C4	336	37436.8	4.96	49.07	80.6	-0.644	cyto
Amacr01g07750	AcrPP2C5	389	42937.91	7.26	43.14	91.7	-0.208	chlo
Amacr01g08880	AcrPP2C6	282	30811.75	8.36	33.41	81.99	-0.405	cyto
Amacr01g14610	AcrPP2C7	283	30991.27	6.46	33.12	87.88	-0.321	cyto
Amacr01g22650	AcrPP2C8	283	30801.79	6.55	35.29	85.12	-0.357	cyto
Amacr01g23620	AcrPP2C9	390	42938.8	7.25	47.32	89.44	-0.221	chlo
Amacr02g02450	AcrPP2C10	358	39357.56	4.6	43.72	92.63	-0.076	nucl
Amacr03g10560	AcrPP2C11	454	48664.6	6.21	35.59	80.13	-0.102	chlo
Amacr03g11670	AcrPP2C12	431	46880.63	8.22	39.19	87.35	-0.189	chlo
Amacr03g16870	AcrPP2C13	647	71391.37	7.78	53.5	78.73	-0.428	nucl
Amacr04g06510	AcrPP2C14	415	46662.18	8.44	39.88	76.99	-0.356	nucl
Amacr04g06590	AcrPP2C15	427	45748.38	6.15	39.62	93.16	-0.085	cyto
Amacr04g08380	AcrPP2C16	481	52924.04	5	35.39	74.82	-0.506	chlo
Amacr04g13500	AcrPP2C17	586	65358.63	4.94	51.17	95.31	-0.18	chlo
Amacr04g14140	AcrPP2C18	517	56438.7	4.99	41.47	88.82	-0.156	nucl
Amacr05g00130	AcrPP2C19	400	43639.38	5	58.01	80.5	-0.258	nucl
Amacr05g03900	AcrPP2C20	422	46037.29	5.51	43.62	78.13	-0.271	chlo
Amacr05g04490	AcrPP2C21	345	37177.16	4.88	45.69	73.25	-0.397	nucl
Amacr05g05220	AcrPP2C22	280	30764.71	6.25	48.77	83.25	-0.443	cyto
Amacr05g05640	AcrPP2C23	336	37663.58	5.49	39.66	88.42	-0.365	nucl
Amacr05g13280	AcrPP2C24	362	40169.72	5.76	40.61	86.96	-0.236	cyto
Amacr06g04240	AcrPP2C25	286	31497.58	6.08	39.25	85.87	-0.408	cyto
Amacr06g09600	AcrPP2C26	372	41692.36	5.76	36.59	78.58	-0.267	cyto
Amacr06g15160	AcrPP2C27	471	51430.51	4.99	40.44	78.07	-0.41	chlo
Amacr07g01040	AcrPP2C28	328	35187.41	5.69	36.56	88.78	-0.114	chlo
Amacr07g03620	AcrPP2C29	672	75028.55	5.66	39.79	83.35	-0.478	chlo
Amacr07g09180	AcrPP2C30	390	42977.86	5.96	44.01	95.28	-0.206	chlo
Amacr07g09830	AcrPP2C31	370	40894.95	5.14	46.68	81.3	-0.451	extr
Amacr07g09850	AcrPP2C32	391	42890.7	4.8	49.17	70.59	-0.589	nucl
Amacr08g03780	AcrPP2C33	428	47053.01	5.05	45.02	76.94	-0.354	cyto
Amacr08g13170	AcrPP2C34	390	44543.78	6.16	38.81	87.72	-0.352	cysk
Amacr09g05970	AcrPP2C35	369	41062.83	8.98	41.23	90.3	-0.285	chlo
Amacr09g06030	AcrPP2C36	909	97587.14	3.93	45.01	85.07	-0.263	chlo
Amacr09g07070	AcrPP2C37	507	54925.76	4.74	47.05	86.53	-0.315	chlo
Amacr09g07590	AcrPP2C38	1078	120097.11	5.3	43.25	86.32	-0.271	chlo
Amacr09g07840	AcrPP2C39	366	39429.13	5.06	64.84	80.63	-0.205	chlo
Amacr10g00930	AcrPP2C40	367	40301.97	4.87	41.28	67.82	-0.485	mito
Amacr10g05920	AcrPP2C41	390	43302.54	6.92	37.82	93.21	-0.2	chlo
Amacr10g07370	AcrPP2C42	348	37910.8	5.84	34.17	86.52	-0.33	nucl
Amacr10g10690	AcrPP2C43	400	44200.21	5.36	52.66	82.57	-0.384	cyto
Amacr11g01850	AcrPP2C44	1034	116449.76	5.44	45.38	82.99	-0.291	chlo
Amacr11g07310	AcrPP2C45	358	39505.92	4.97	46.36	92.6	-0.132	cyto
Amacr11g08250	AcrPP2C46	568	62317.33	5.08	40.83	79.88	-0.439	nucl
Amacr11g08270	AcrPP2C47	317	34436.13	5.05	35.04	93.15	-0.064	cyto
Amacr11g09880	AcrPP2C48	427	46480.67	5.84	44.17	78.13	-0.292	chlo
Amacr12g01200	AcrPP2C49	771	85654.24	5.49	40.44	80.6	-0.465	nucl
Amacr12g01210	AcrPP2C50	145	16736.09	5.75	39.59	90	-0.269	chlo
Amacr12g03770	AcrPP2C51	289	31350.39	5.17	37.07	92.98	-0.124	chlo
Amacr12g10070	AcrPP2C52	329	35463.42	5.54	39.25	73.8	-0.437	chlo
Amacr12g10350	AcrPP2C53	262	28608.7	8.14	29.94	78.89	-0.219	nucl
Amacr12g13400	AcrPP2C54	375	41114.63	5.36	48.64	80.88	-0.255	nucl
Amacr13g02720	AcrPP2C55	406	45957.17	8.16	48.58	85.71	-0.401	mito
Amacr13g04020	AcrPP2C56	525	57741.08	4.88	52.4	87.07	-0.203	chlo
Amacr13g05080	AcrPP2C57	537	59481.27	5.38	43.78	85.72	-0.412	nucl
Amacr13g06950	AcrPP2C58	290	32778.27	7.67	36.81	84.41	-0.451	cyto
Amacr13g07330	AcrPP2C59	370	41124.92	6.68	40.06	86.16	-0.273	chlo
Amacr13g07680	AcrPP2C60	376	41741.58	6.57	40.32	87.87	-0.159	chlo
Amacr13g07960	AcrPP2C61	405	44150.34	4.82	36.12	81.53	-0.236	cyto
Amacr13g09730	AcrPP2C62	353	39578.32	8.42	43.79	84.36	-0.364	cyto
Amacr13g09770	AcrPP2C63	449	49600.47	4.95	54.33	73.63	-0.553	chlo
Amacr15g02420	AcrPP2C64	718	79175.19	5.34	35.81	73.98	-0.498	nucl
Amacr15g03400	AcrPP2C65	313	33276.47	4.77	44.63	89.07	-0.024	chlo
Amacr15g10450	AcrPP2C66	777	86304.82	6.36	43.94	84.56	-0.321	plas
Amacr16g06390	AcrPP2C67	292	32026.26	6.31	30.95	91.13	-0.282	cyto
Amacr16g07720	AcrPP2C68	399	44371.46	6.63	47.43	77.67	-0.483	cyto
Amacr17g03670	AcrPP2C69	398	44027.19	8.77	45.36	89.65	-0.24	chlo