

Fig. 1

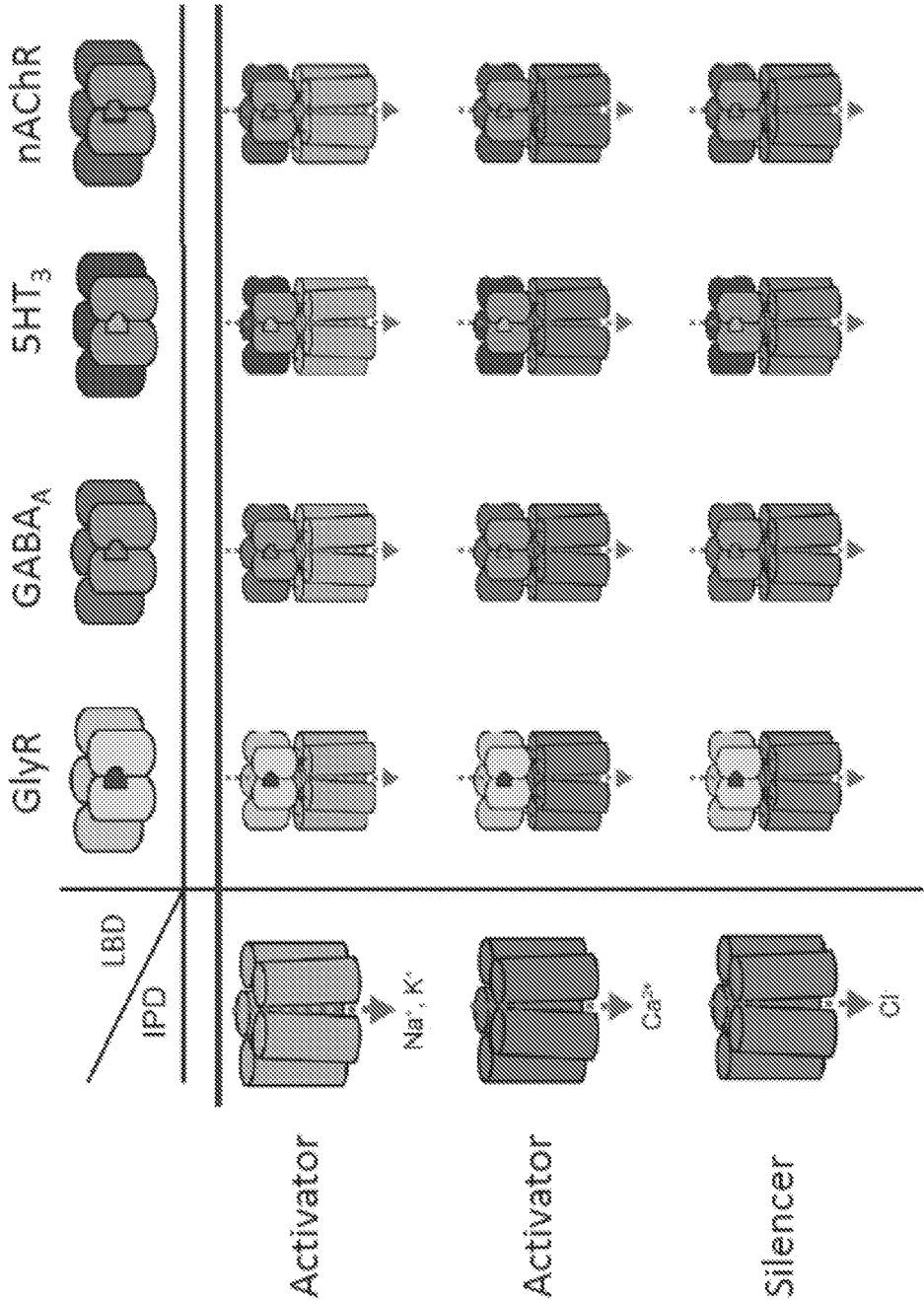


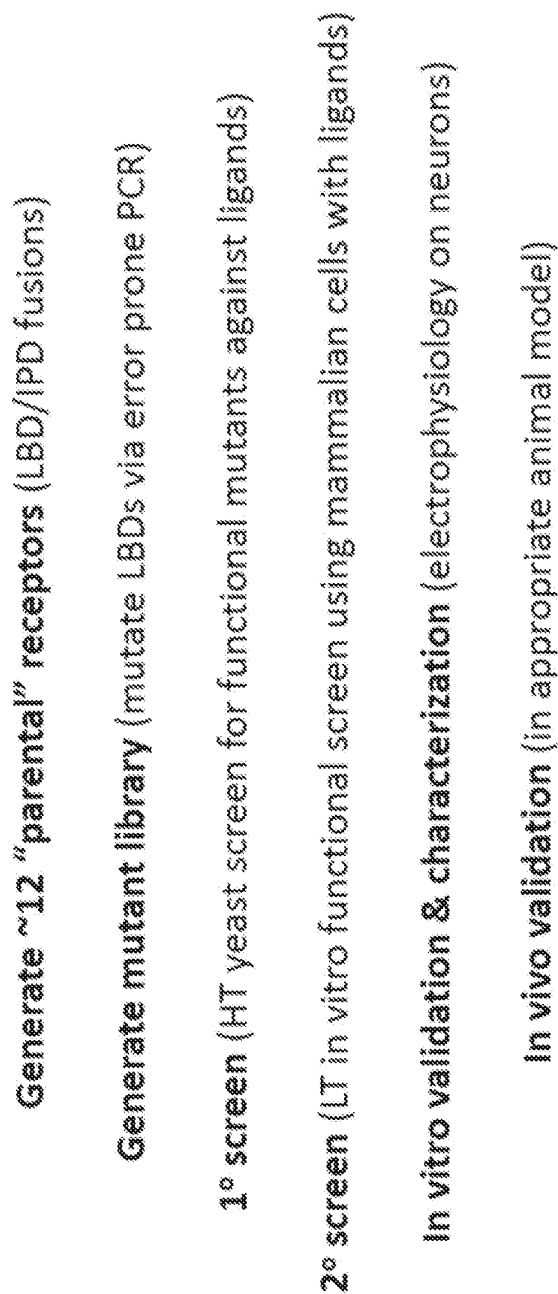
Fig. 2

Fig. 3

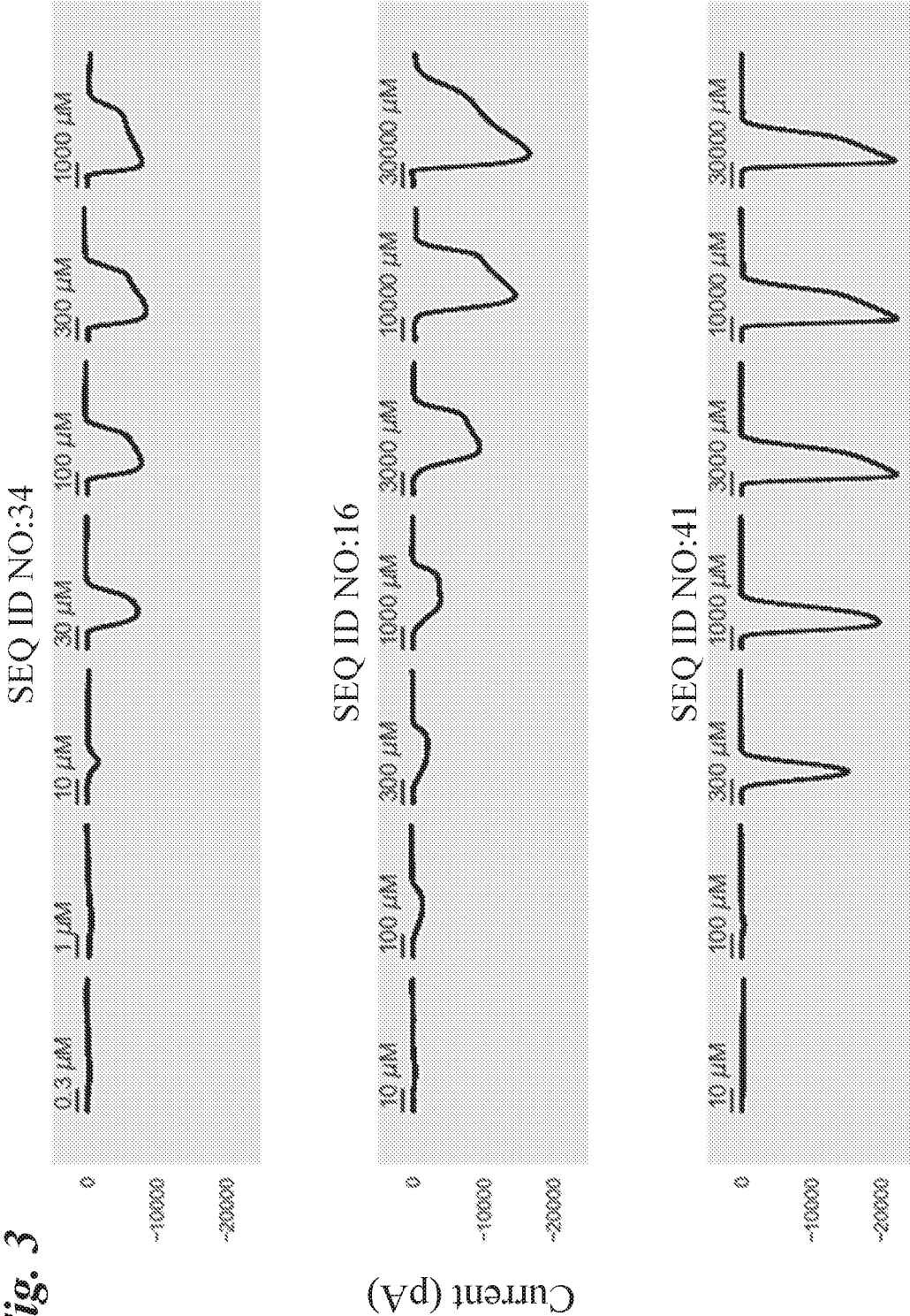


Fig. 4A

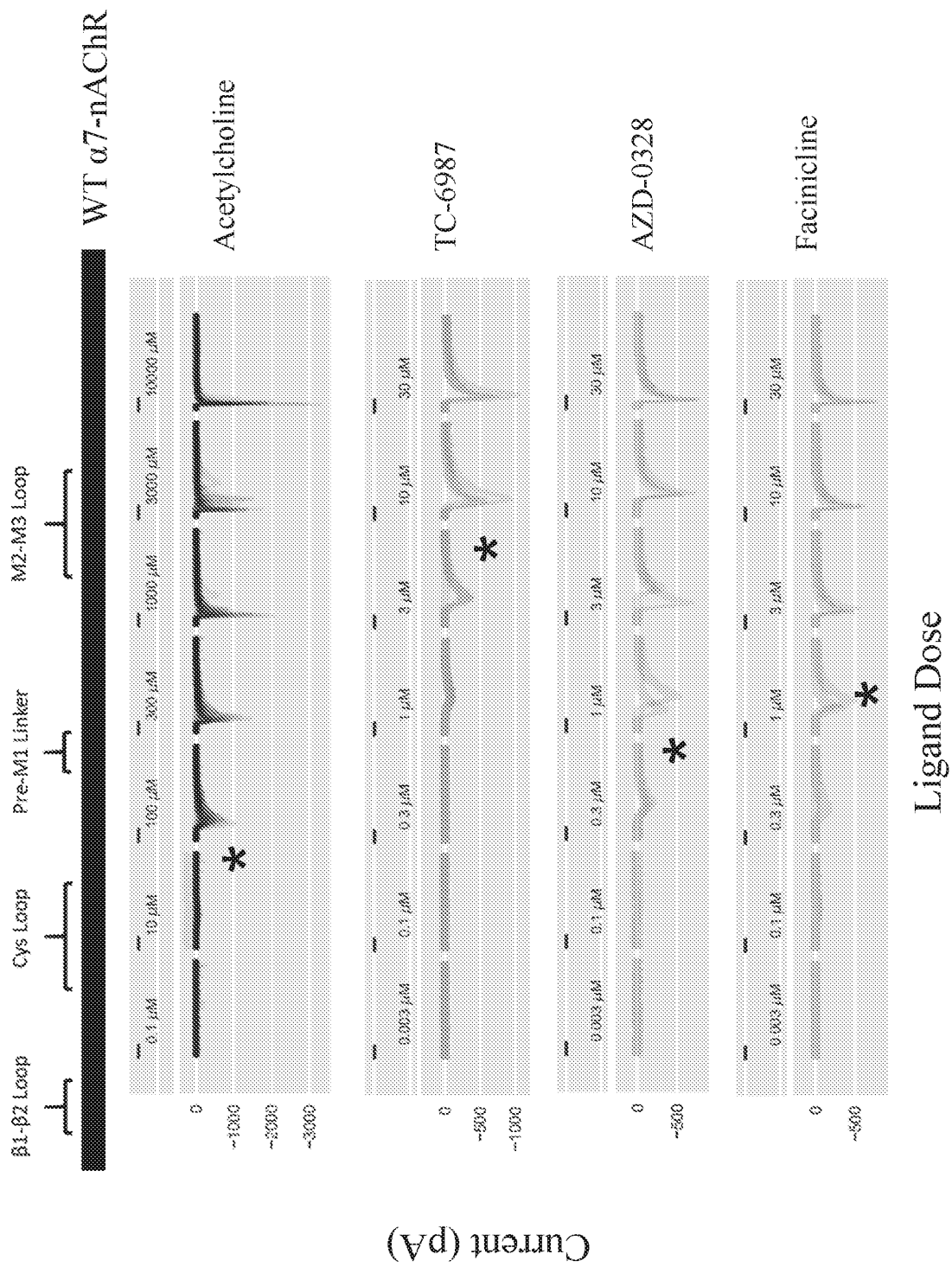


Fig. 4B

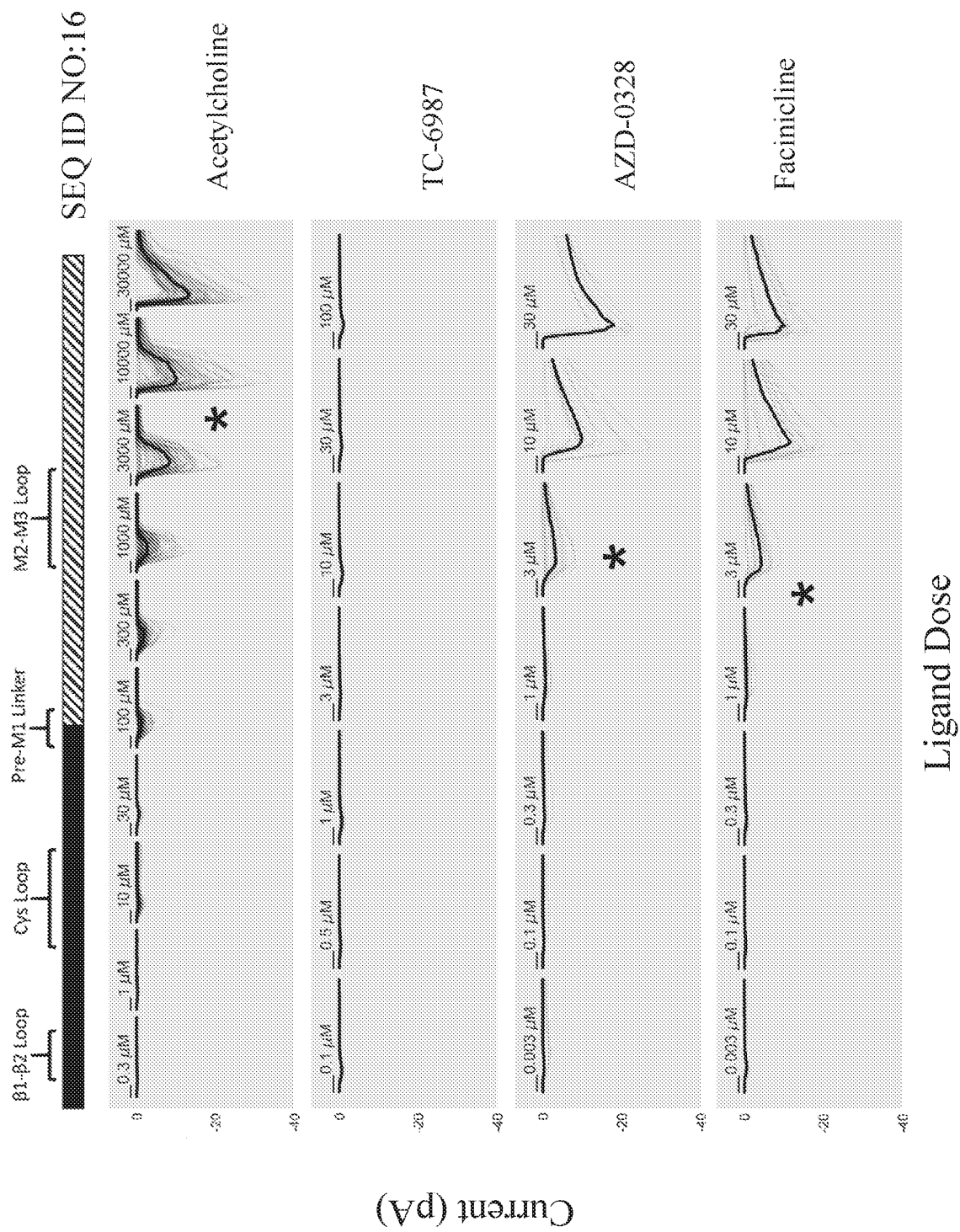
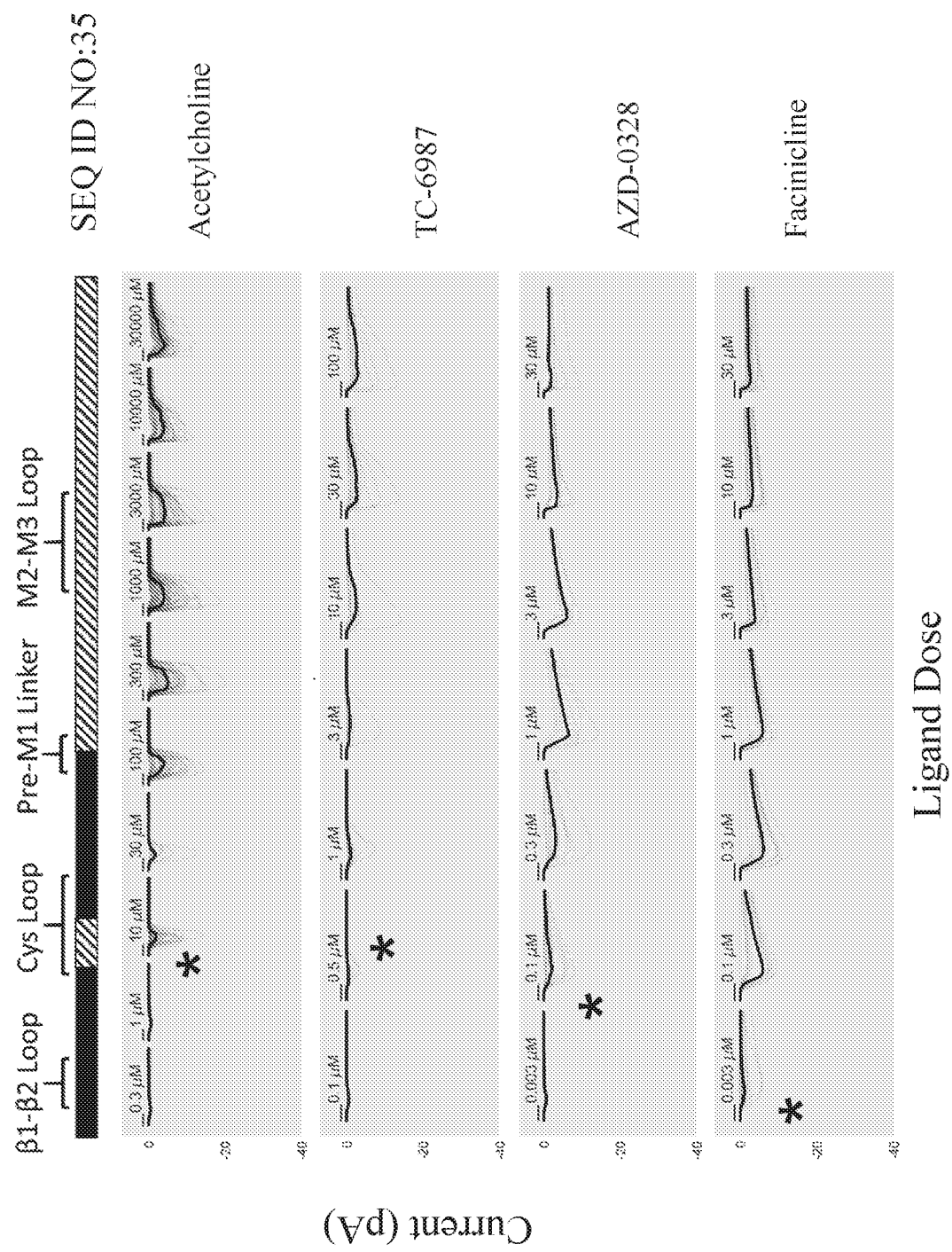


Fig. 4C



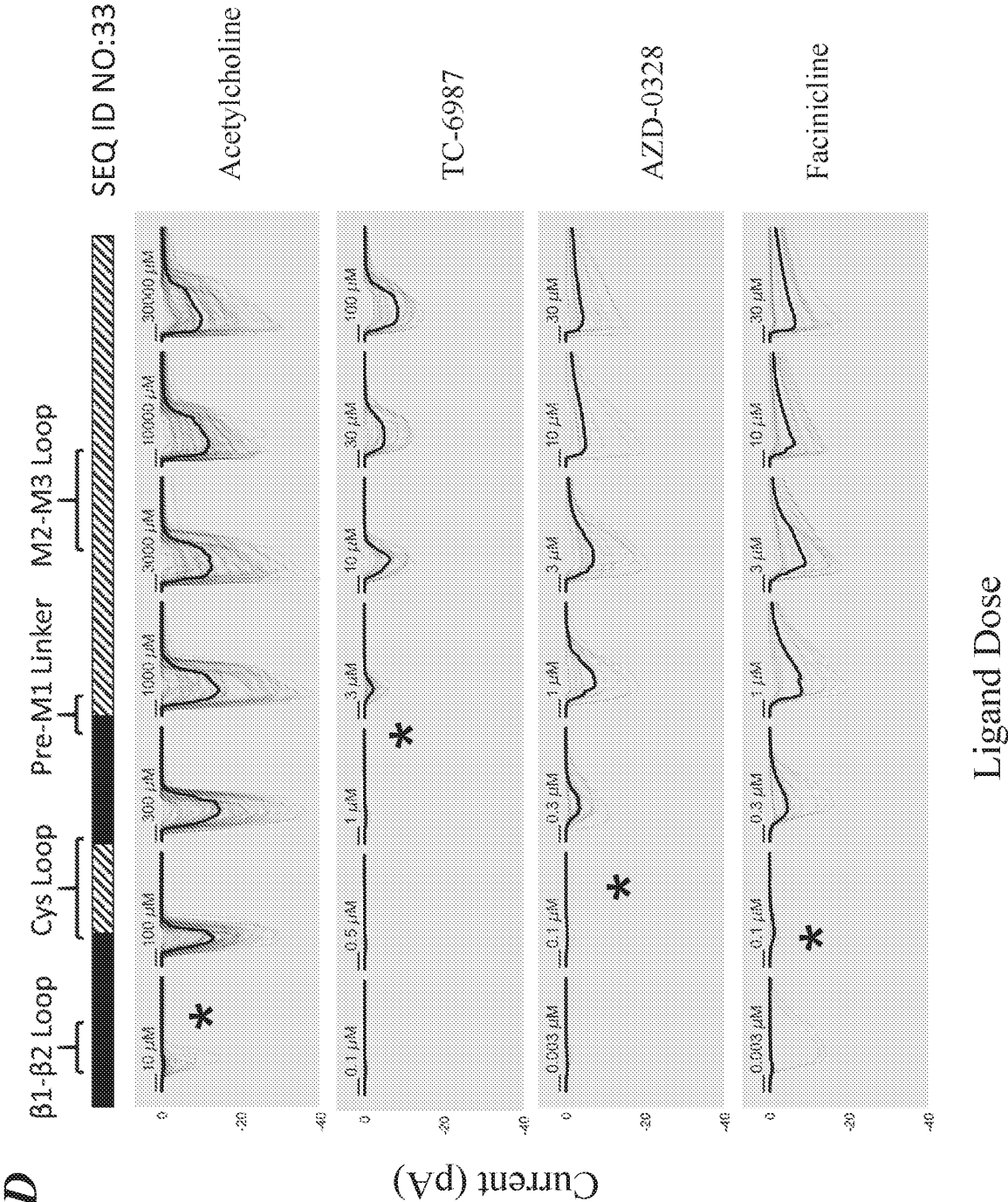


Fig. 4E

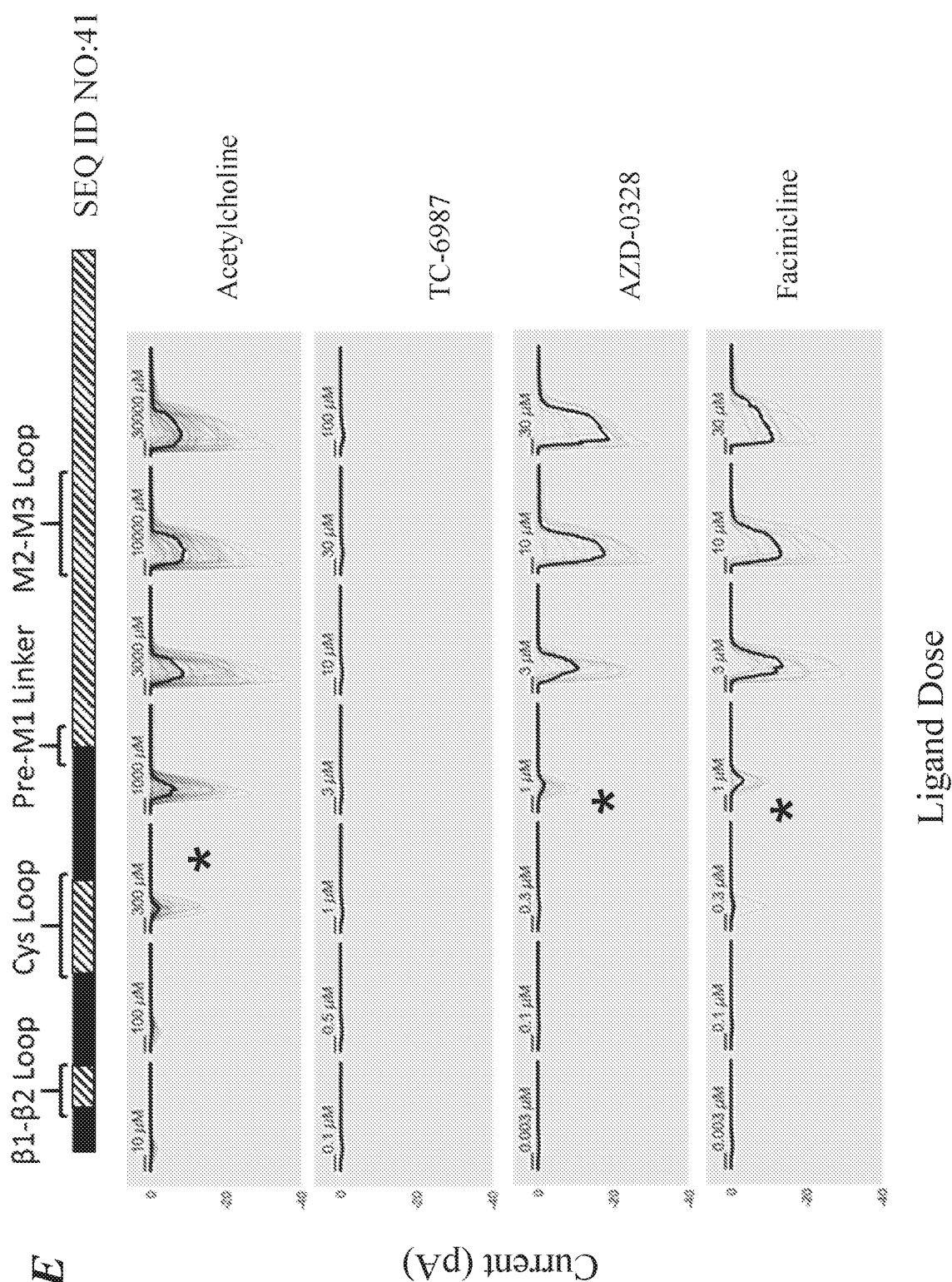


Fig. 4F

WO 2019/104307

9/30

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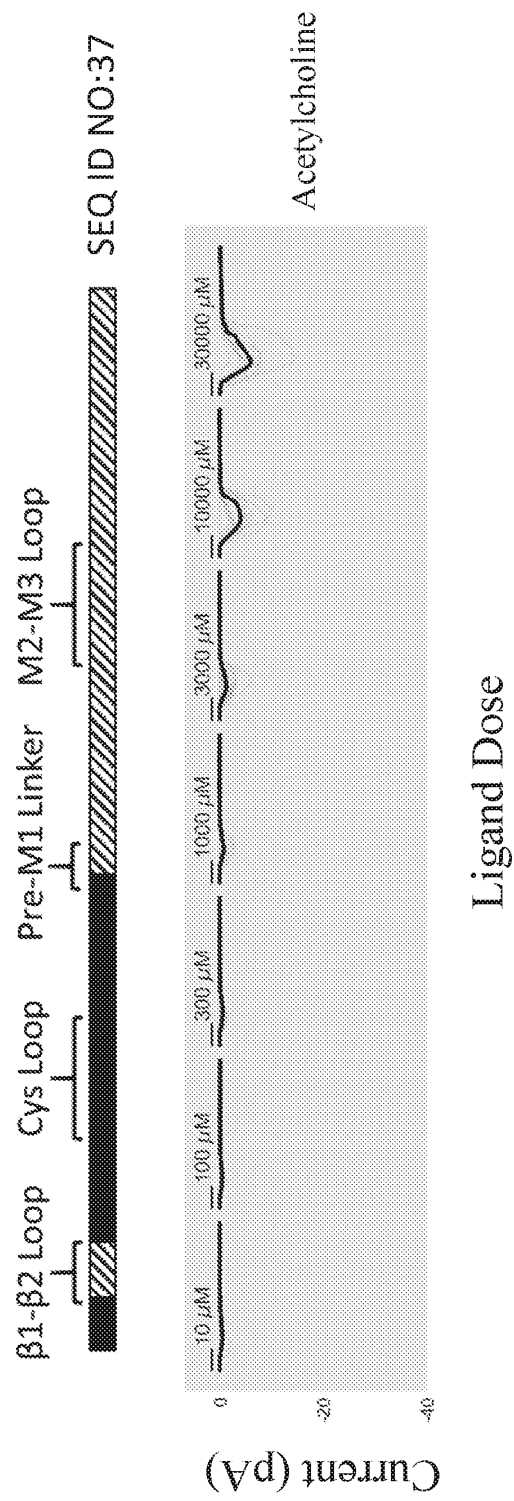


Fig. 5A

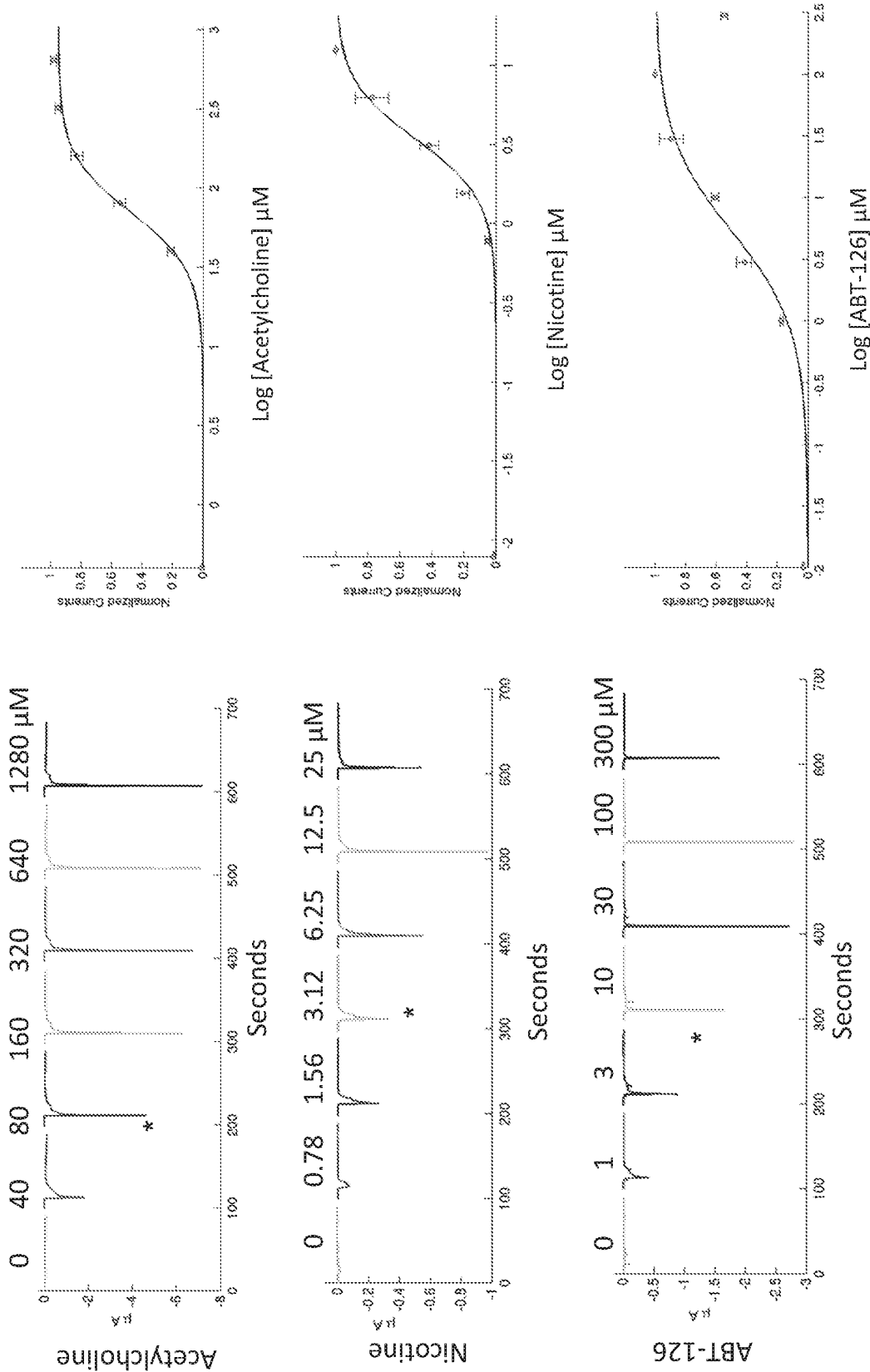


Fig. 5B

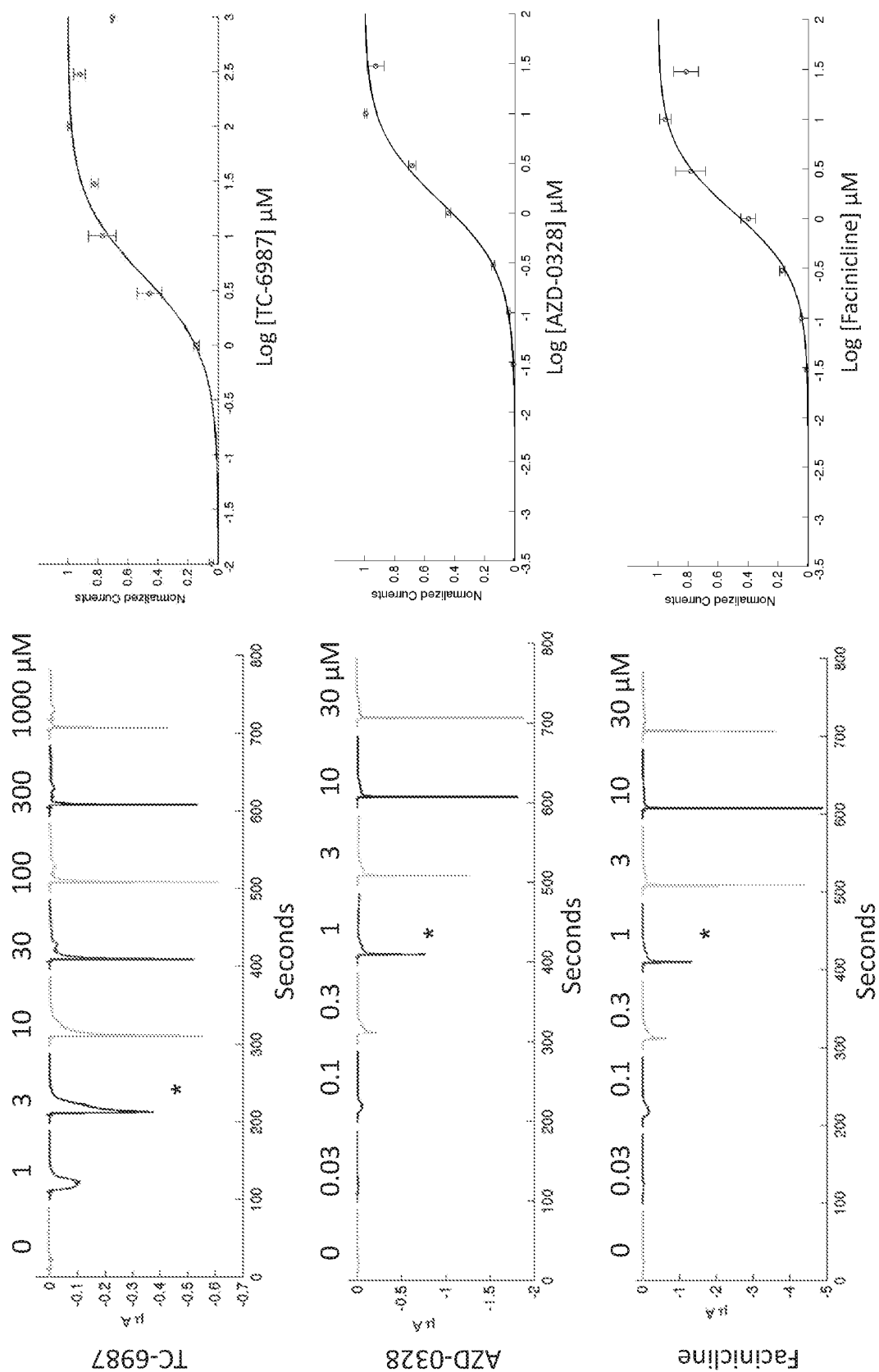


Fig. 5C

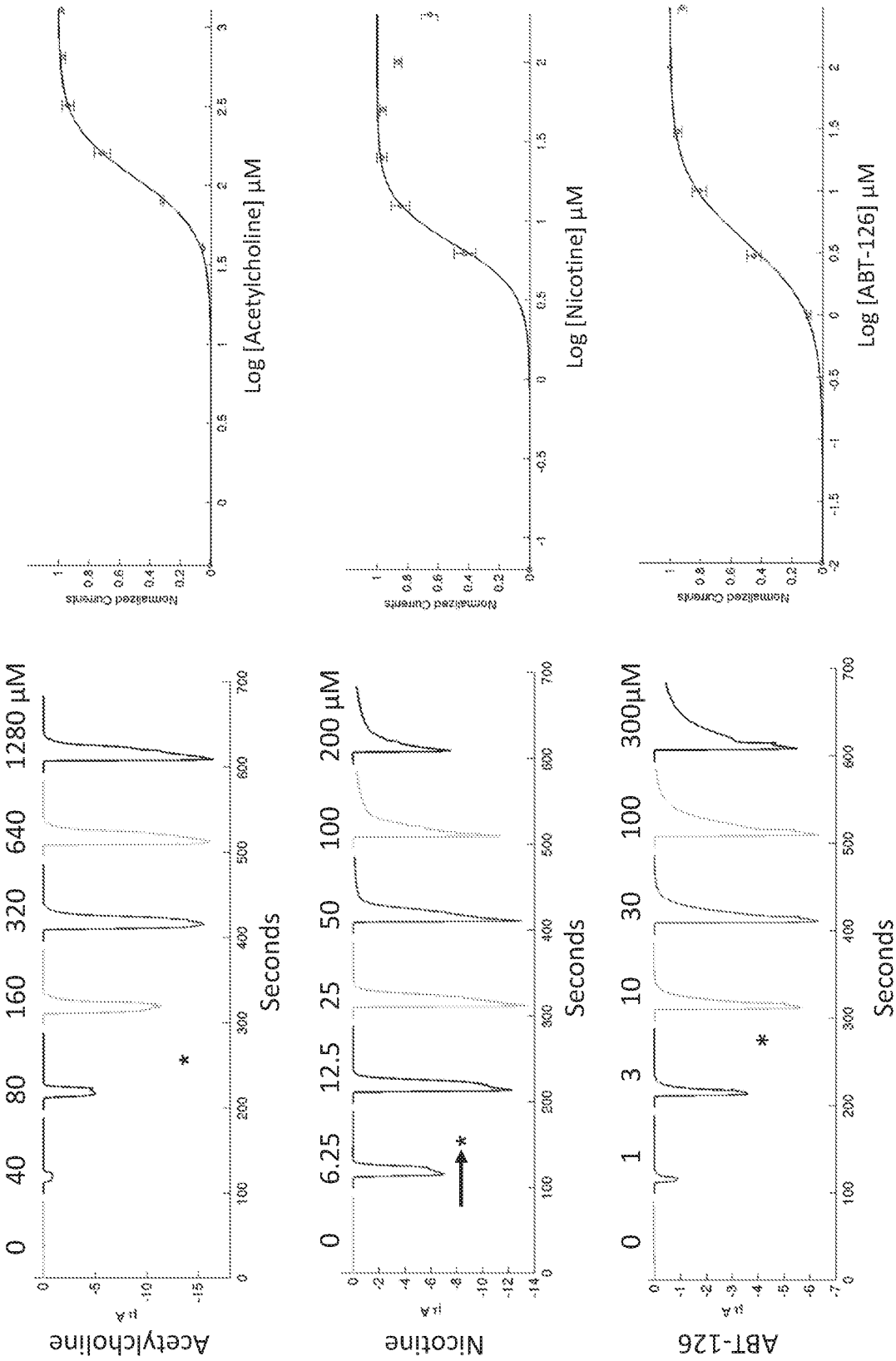


Fig. 5D

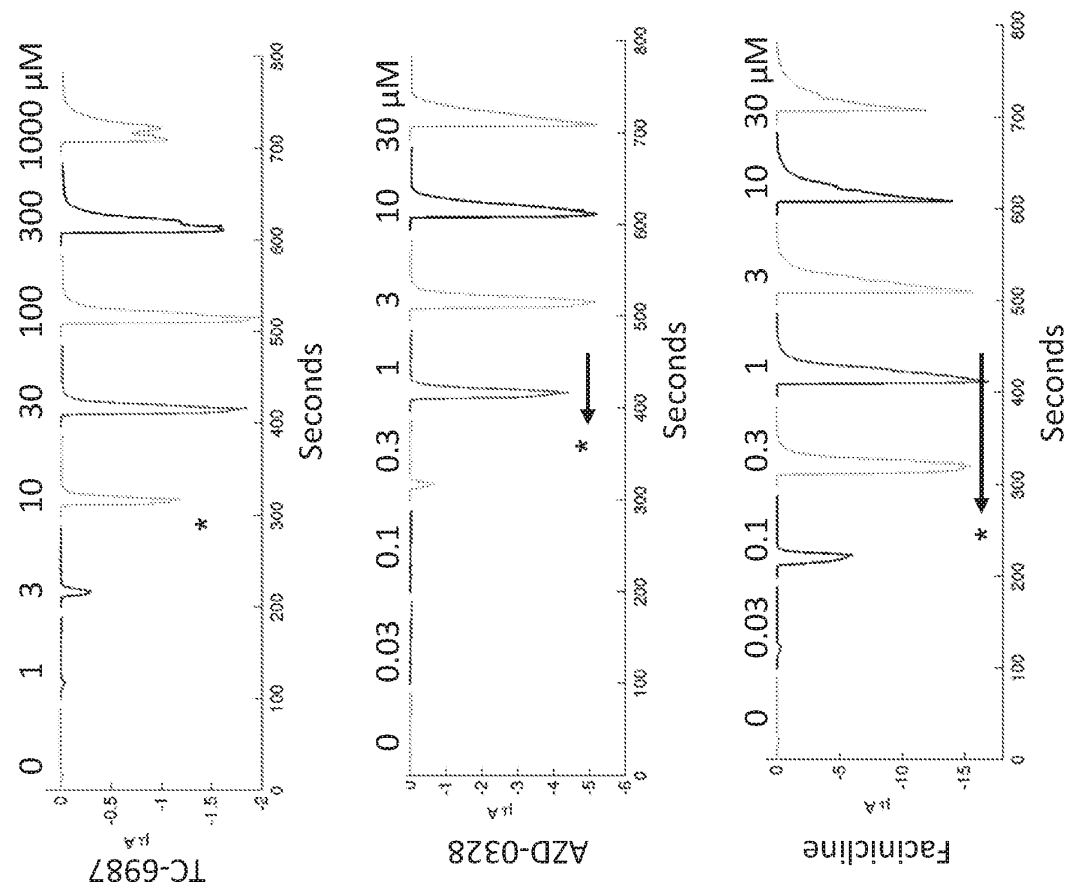


Fig. 5E

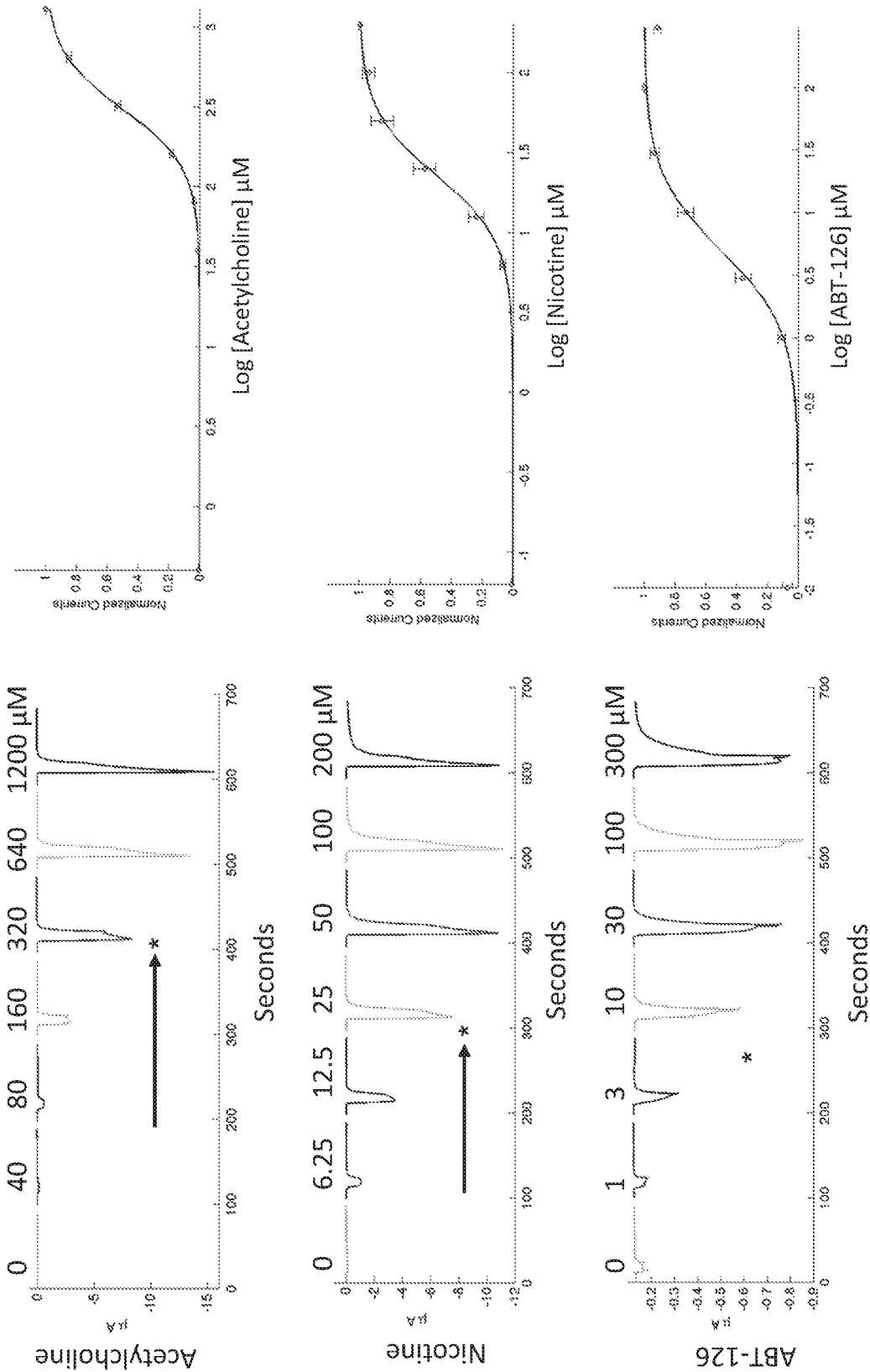


Fig. 5F

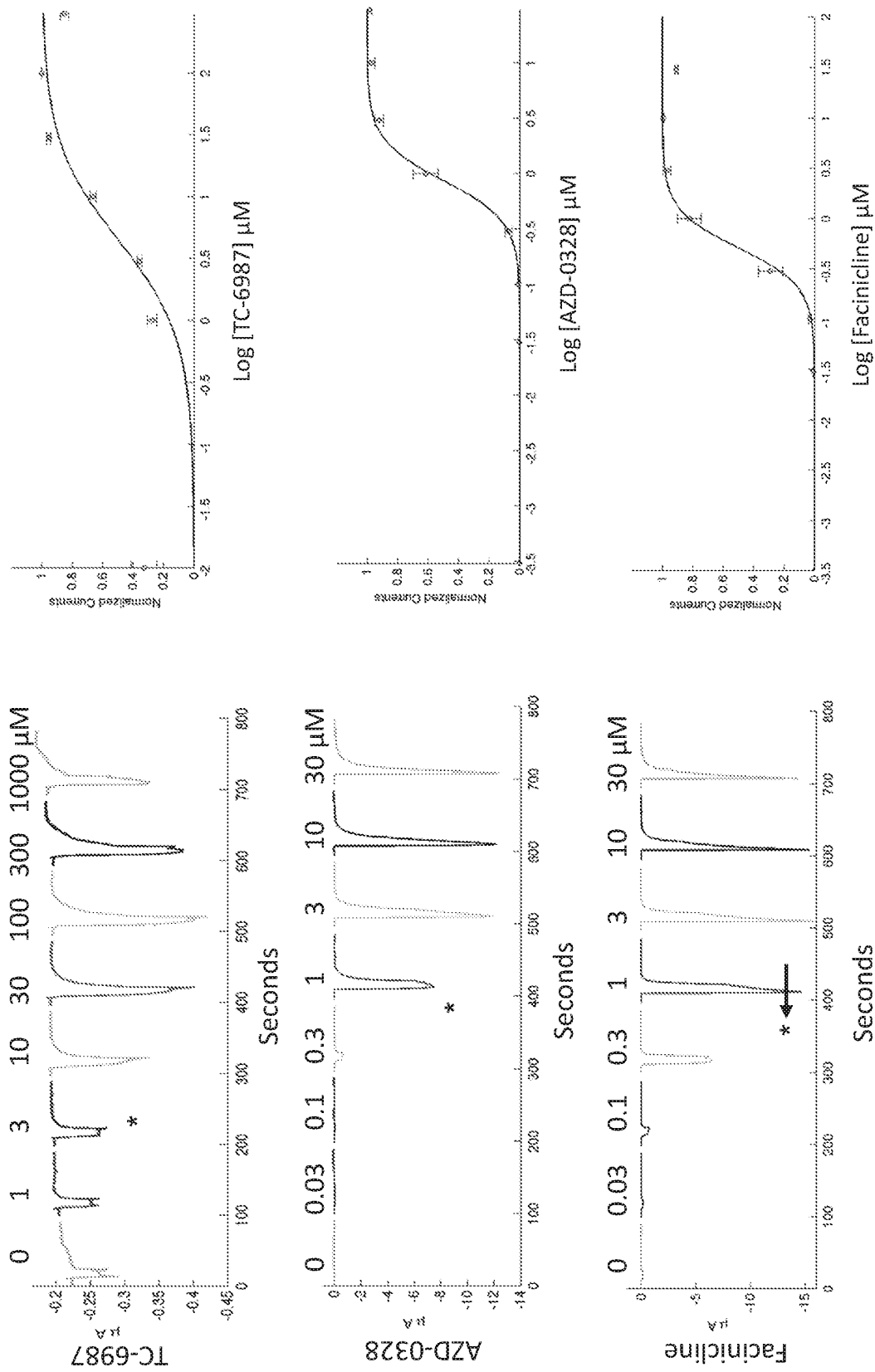
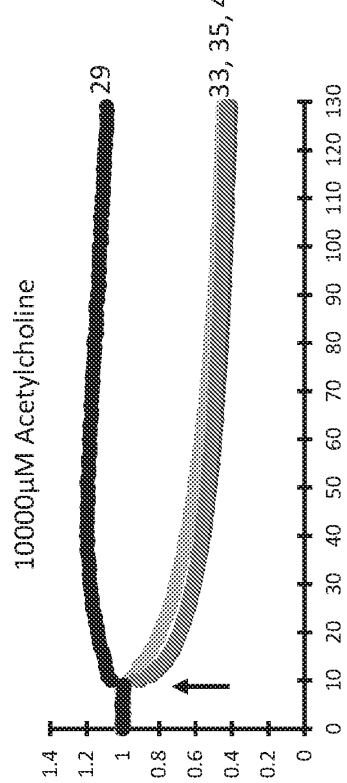
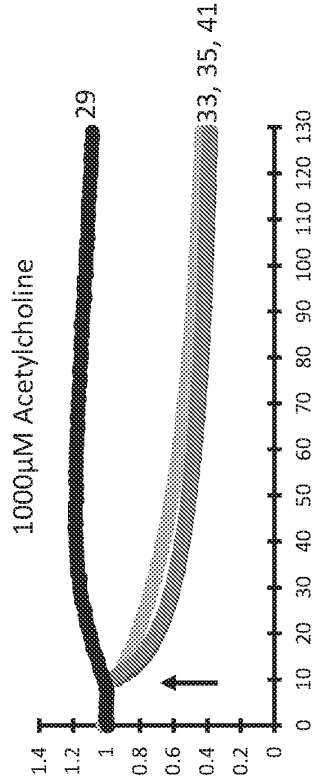
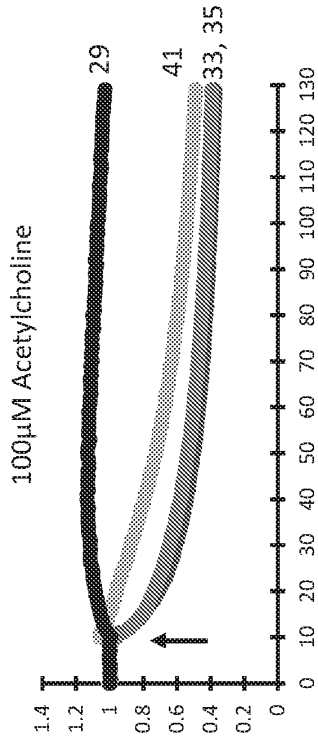
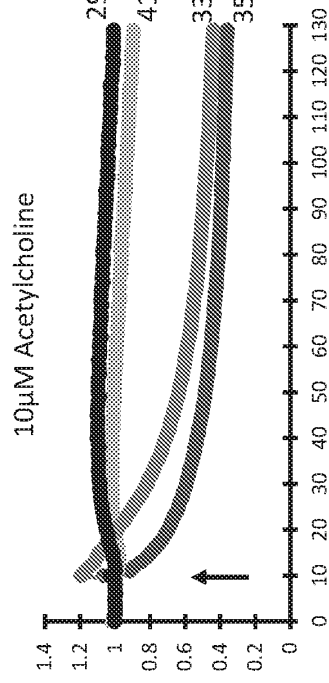
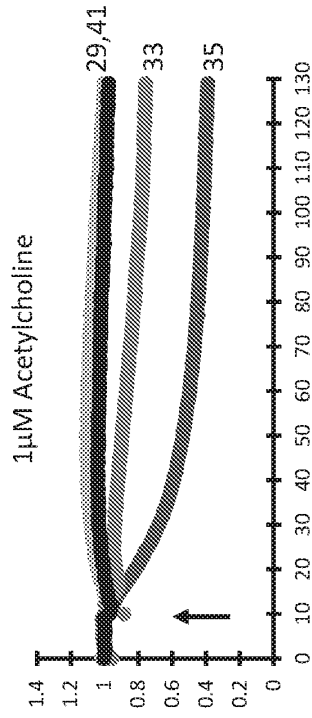
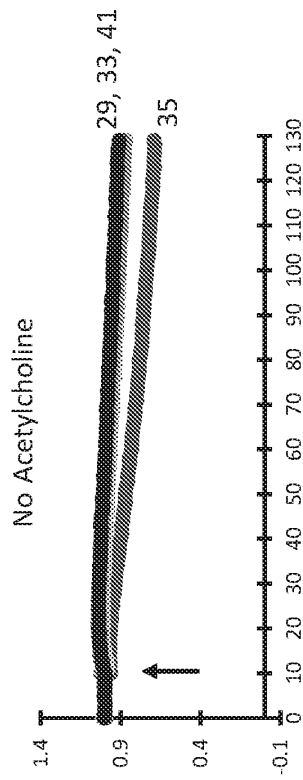


Fig. 6



 SEQ ID NO:29
  SEQ ID NO:33
  SEQ ID NO:35
  SEQ ID NO:41

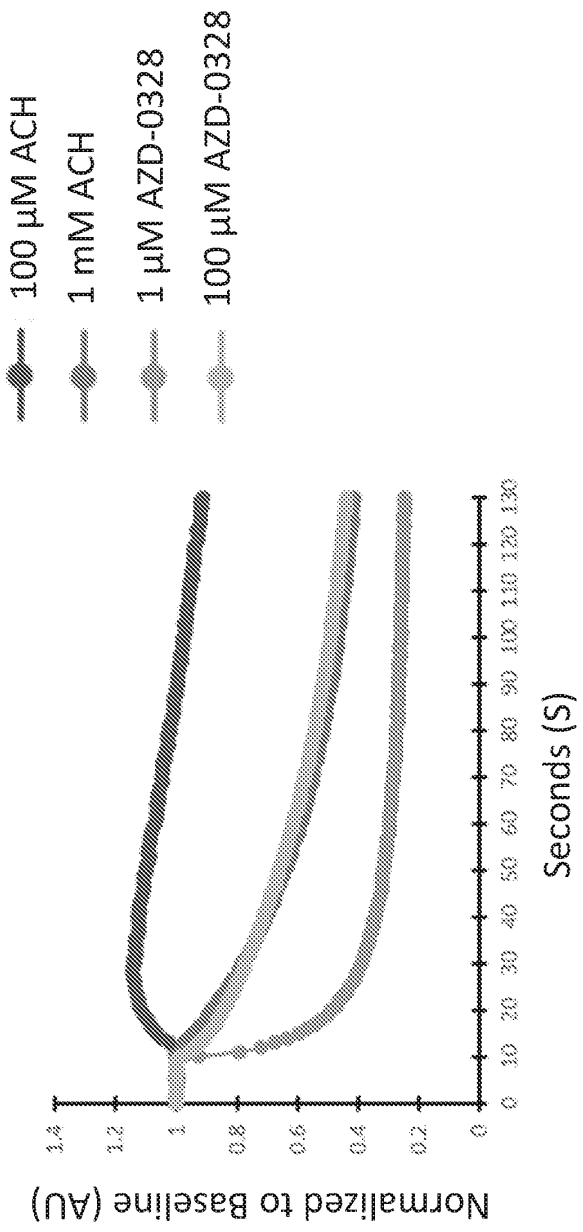
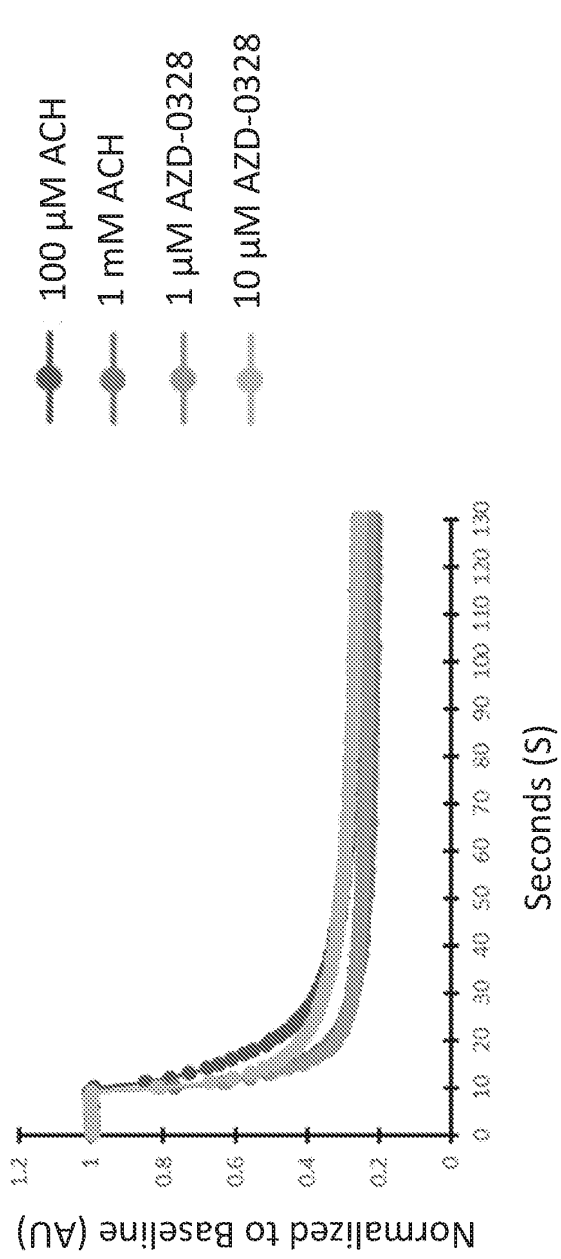


Fig. 8A

Acetylcholine

AZD-0328

	10uM	100uM	100uM	3mM	3mM	100nM	100nM	300nM	300nM	30uM	30uM	Amino acid	Mutation
SEQ ID 33	20.867	27.799	83.961	82.195	84.968	85.016	83.682	83.622	85.273	85.947	86.62	W77	
SEQ ID 29	-0.677	2.251	-1.564	1.481	-1.345	-0.449	1.331	1.035	-2.173	0.997	0.454	W77	
	-10.109	-16.868	-9.316	-17.342	7.934	-11.636	-7.435	-9.033	-3.826	-6.302	42.118	W77	H
		0.529	84.362	56.647	79.862	82.349	16.825	2.633	18.687	0.958	82.459	W77	I
		-4.968	69.209	76.773	81.64	80.549	28.245	20.458	47.912	62.32	83.205	W77	V
	-2.552	-2.371	71.421	72.872	81.354	82.315	-2.212	-5.871	12.053	12.586	81.849	W77	F
	8.214	11.835	80.622	79.864	82.54	14.377	-0.919	-0.803	44.279	-22.477	83.085	W77	Y
	-0.477	-9.639	30.054	47.818	81.027	80.487	-8.074	3.076	1.03	6.925	81.782	W77	D
		-0.796	26.175	48.527	83.191	83.323	3.239	0.189	-7.822	-6.608	84.482	W77	A
		-1.391	-2.038	4.322	70.452	63.404	5.727	-4.173	-2.366	0.071	25.02	W77	G
	-9.137	-14.278	-12.452	-12.853	51.313	66.657	-10.729	-10.127	-2.829	0.407	31.034	W77	Q
	-15.397	-9.602	29.004	10.615	81.258	19.256	-17.303	-16.641	-17.089	-19.56	79.482	W77	C
	-14.795	-6.996	-4.544	-2.411	74.917	25.798	-6.854	-17.865	-8.139	-20.444	82.563	W77	N
	-0.595	-3.021	2.708	17.964	79.943	78.188	-15.108	13.223	12.003	9.973	79.477	W77	E
	-4.809	-11.127	-12.713	-14.963	-12.466	-12.043	-20.583	-9.599	-18.529	-12.742	80.953	R101	I
	-16.875	-12.38	-10.484	-18.389	17.137	5.158	-6.645	-8.503	-18.758	-10.822	82.37	R101	S
	-5.956	-13.803	-21.706	-13.845	-15.378	-17.305	-19.267	-14.213	-13.33	-11.97	81.312	R101	D
	-14.579	-16.834	60.791	56.016	80.757	77.367	-9.582	-3.663	59.47	50.59	82.011	R101	F
	-6.873	-15.037	43.913	45.127	81.213	79.71	17.545	6.512	71.347	72.339	81.756	R101	C
	-7.953	-16.688	56.949	56.968	80.138	80.09	15.458	11.252	70.4	69.734	81.519	R101	Y
	-4.503	-14.088	57.777	58.617	81.878	77.536	-3.301	-10.064	70.559	66.357	83.254	R101	H
	-13.732	-19.477	32.316	27.316	81.42	80.498	-5.485	-12.215	65.705	68.678	83.92	R101	K
	11.826	12.408	-8.821	-13.363	79.549	76.007	13.839	-6.514	45.632	36.809	79.816	R101	P
	-13.857	-15.236	1.234	0.729	80.535	78.8	-14.126	-12.672	41.962	52.515	81.829	R101	Q
	-8.131	-20.055	-10.796	-20.805	77.366	72.162	-8.611	-1.412	-2.182	-9.674	83.643	R101	G
	-23.28	-23.213	-18.41	-23.304	79.675	73.826	-8.068	-14.53	2.197	3.376	81.467	R101	A
	-10.284	-10.355	-4.98	-12.608	45.528	31.836	-11.292	-6.218	2.661	-15.393	81.617	R101	L

SEQ ID 33
variants

Fig. 8B

Acetylcholine

AZD-0328

10uM	10uM	100uM	100uM	3mM	3mM	100nM	100nM	300nM	30uM	30uM	Amino acid	Mutation
-8.825	-5.402	-15.651	-14.863	73.106	60.353	-15.654	-11.495	-19.873	-13.362	-11.385	R101	V
-12.94	-14.64	-13.293	-20.217	80.589	78.137	-15.508	-15.687	-7.671	-9.861	-80.781	R101	M
-9.439	-13.859	-16.524	-16.685	80.794	78.189	-16.325	-20.258	-17.956	-20.703	-83.492	R101	T
-9.788	-12.533	-20.59	-15.009	81.049	79.325	-18.045	-21.771	-15.833	-13.226	-84.483	R101	N
-10.661	-13.963	-18.961	-10.812	80.387	79.423	-8.036	-12.823	9.227	18.225	-83.97	R101	E
-12.041	-12.655	26.08	43.573	69.94	69.329	-0.123	4.059	50.957	62.591	75.045	W108	Y
1.632	5.295	4.878	2.558	3.235	4.624	2.171	-16.564	3.106	-2.296	31.438	Y115	L
-4.79	1.529	-8.445	9.506	28.672	13.609	-2.62	5.001	-4.496	-4.462	74.353	Y115	M
-5.235	1.01	-5.817	-3.438	-1.955	-1.577	3.753	1.007	-1.649	2.958	77.845	Y115	D
-12.41	-9.124	88.305	54.254	80.195	79.488	-5.85	3.792	-9.389	-10.638	5.074	Y115	W
-12.236	-12.669	-6.875	-7.433	74.786	76.761	-11.535	-10.853	-14.086	-13.952	51.469	Y115	G
-3.14	-3.913	2.466	-1.665	75.312	78.777	-5.226	-16.949	-7.833	-7.27	80.021	Y115	A
5.316	11.723	8.942	12.164	73.79	72.871	4.112	14.773	12.968	7.834	41.069	Y115	I
-5.125	-3.183	-0.136	-1.925	79.586	80.023	8.072	8.114	-2.068	1.45	61.366	Y115	V
-18.93	-12.145	-9.491	-4.244	48.332	40.085	-9.532	-2.566	-11.667	-9.665	-6.218	Y115	P
-8.458	-2.409	-17.987	-7.442	72.439	72.407	3.783	8.65	-5.97	-8.59	19.388	Y115	S
1.102	3.538	2.143	-0.135	61.266	57.272	7.902	13.556	3.557	3.402	-15.096	Y115	Q
-13.916	-1.356	-6.706	-7.938	9.499	8.206	2.103	4.589	-2.229	0.03	49.586	Y115	T
-12.908	-7.317	-8.935	-10.913	63.132	65.816	2.084	3.07	-4.011	-2.946	34.019	Y115	C
-6.519	-8.946	-11.913	-10.677	57.632	55.247	1.72	0.767	43.349	43.681	80.1	Y115	E
-21.809	-5.743	-9.829	-6.514	76.004	76.752	-12.875	0.19	-4.929	-1.761	79.476	Y115	H
-7.143	-6.201	-9.845	-10.034	-12.141	-11.832	-17.289	-6.651	-12.767	-11.875	43.697	T128	M
-11.633	-8.407	-12.308	-12.082	2.43	6.274	14.564	-9.879	-8.513	-10.97	77.705	T128	R
-11.768	-9.407	68.297	61.27	83.747	82.861	-9.063	0.04	68.56	63.847	93.136	T128	S
-2.884	0.966	57.607	44.48	80.056	80.303	-2.647	-9.613	24.726	35.957	92.021	T128	E
-3.346	-7.812	-4.049	-4.482	76.746	79.467	-9.159	-11.781	-16.312	-3.687	84.228	T128	G
-6.907	-7.255	-7.511	-7.219	76.783	79.073	-8.2	-8.874	-5.865	-3.224	81.212	T128	A
-13.703	-10.415	-12.227	-14.158	6.511	51.313	-16.363	-14.933	-17.238	-14.949	51.045	T128	I
-3.459	-2.067	0.996	5.252	72.1	78.08	-6.012	17.155	-3.456	-6.976	81.847	T128	P
-2.828	-8.351	-3.389	-6.828	65.138	60.242	-14.677	-8.966	-4.288	-5.309	79.745	T128	F
-11.807	-8.285	-4.938	-8.718	36.198	30.949	-12.783	-10.117	-10.029	-13.61	78.39	T128	W

SEQ ID 33
variants

Fig. 8C

Acetylcholine

AZD-0328

10uM	10uM	100uM	100uM	3mM	3mM	100nM	100nM	300nM	300nM	30uM	30uM	Amino acid	Mutation
-7.376	-6.2	-7.445	-6.898	78.692	78.838	-8.67	-10.111	-6.719	-5.846	81.528	83.29	T128	Q
-6.905	-11.483	4.531	20.583	77.041	80.124	-12.381	-11.096	19.428	3.651	80.497	81.494	T128	C
-5.893	-2.954	-12.299	-5.003	29.544	65.881	-5.32	-8.049	-6.133	-5.357	82.376	83.918	T128	N
-6.889	-5.165	10.937	6.517	34.775	70.94	-10.404	-12.506	-7.863	-5.756	80.592	78.456	T128	Y
4.317	1.756	-3.098	-5.05	33.439	33.24	-4.236	-6.722	-4.73	-0.302	83.053	84.277	T128	D
-10.201	-8.367	-8.8	-6.515	52.63	62.062	-11.442	-11.61	-9.991	-7.684	77.925	83.024	T128	K
-17.555	-12.582	-9.386	-14.272	71.44	61.115	-16.164	-14.655	-8.821	-13.447	69.952	77.053	T128	H
-6.826	-14.236	27.188	28.546	50.674	78.438	-10.006	-18.114	51.294	48.49	77.971	80.036	T128	V
4.937	-3.387	-7.557	-2.078	-6.747	-5.618	-11.176	-7.977	-9.242	-7.453	76.182	75.789	N129	I
-6.173	-6.145	-16.274	-11.45	19.342	32.583	-12.057	-13.639	-15.999	-9.471	79.157	76.213	N129	V
-6.739	-3.799	-3.78	-5.285	4.198	-5.142	-6.818	1.319	-7.815	-3.12	81.744	81.521	N129	P
-13.436	-8.73	-12.355	-12.849	-3.451	-7.8	-15.746	-14.641	-13.372	-10.802	79.467	80.673	N129	W
-1.742	-8.271	-8.539	-15.355	-9.503	-7.284	-8.972	-15.574	-13.984	-5.593	81.143	82.407	N129	T
-5.417	-0.622	-7.572	-7.759	-4.92	-4.898	1.691	0.912	-5.45	-1.348	83.912	82.28	N129	D
-7.959	-7.555	-8.831	-12.437	-8.829	-8.041	-7.124	-4.035	-9.348	-5.056	81.111	80.732	N129	E
-9.816	-2.456	11.107	-10.838	79.077	79.862	-15.645	-13.413	-2.576	8.006	75.764	81.989	N129	G
-6.222	-8.236	-14.23	-8.99	44.486	18.493	-14.33	-14.098	-8.165	-9.971	82.727	81.359	N129	A
-8.186	-9.87	11.441	-14.394	79.246	72.662	-15.003	-10.2	-11.3	-2.176	80.676	82.59	N129	S
-6.738	-9.01	-10.033	-13.826	81.957	79.202	-12.981	-8.799	3.724	10.486	83.242	82.683	N129	Q
-13.043	-7.593	-11.891	-13.406	38.623	44.524	-8.525	-11.496	-14.04	-10.407	79.051	77.738	N129	C
-7.657	-3.695	-5.851	-9.004	78.557	78.77	-6.028	-7.443	18.455	30.104	82.477	80.594	N129	Y
-11.215	-9.001	-4.666	-11.226	81.383	78.104	-12.409	-12.835	35.455	46.328	77.247	80.183	N129	F
-14.438	-7.153	-7.615	-8.016	78.816	73.637	-12.837	9.703	31.806	52.417	76.652	82.348	N129	M
-9.048	-5.826	-8.224	-2.833	79.845	80.178	-6.654	-6.457	32.769	37.231	80.144	80.964	N129	R
-5.828	-7.079	-2.95	7.323	82.378	81.401	-0.289	-4.373	60.981	64.424	81.351	81.331	N129	H
-11.849	-10.777	12.365	31.95	78.879	78.557	-16.847	-3.981	56.871	57.495	-12.332	80.363	N129	L
4.408	5.704	0.795	4.774	25.856	27.313	-1.506	-4.046	10.218	10.069	30.433	33.789	L131	P
-9.899	0.435	-7.862	-3.572	45.363	51.016	17.766	13.983	52.577	44.526	82.08	81.721	L131	T

SEQ ID 33
variants

Fig. 8D

Acetylcholine										AZD-0328						
10uM	10uM	100uM	100uM	3mM	3mM		100nM	100nM	300nM	30nM	30uM	30uM	Amino acid	Mutation		
3.932	-10.341	-5.595	-7.042	80.597	80.053		-1.688	-8.127	32.709	26.851	81.875	81.827	L131	K		
2.379	1.696	2.398	-1.491	79.379	80.219		5.254	7.158	69.07	70.106	81.521	80.979	L131	R		
12.472	-10.451	71.302	73.095	82.709	82.229		-0.309	-9.028	-3.135	2.668	83.426	82.476	L141	G		
-10.377	-0.575	52.167	49.38	80.901	82.329		-2.911	7.115	-3.583	-3.353	82.723	82.282	L141	A		
7.328	5.513	73.635	77.204	79.965	79.102		-1.251	-0.232	0.45	2.832	80.699	79.84	L141	V		
5.194	6.614	41.961	41.46	80.214	80.388		-0.399	4.193	-1.456	4.205	79.789	80.895	L141	D		
20.499	-13.707	70.495	70.979	81.782	80.44		10.498	9.299	16.452	21.59	82.765	82.498	L141	H		
28.116	18.795	71.594	72.816	75.322	78.111		4.174	19.335	32.257	15.705	79.792	79.401	L141	C		
5.304	5.719	79.596	80.576	80.594	80.029		27.504	15.49	77.19	73.334	80.978	82.367	L141	Y		
-0.374	1.72	-6.884	-8.38	60.747	63.195		-10.065	-5.633	-9.605	-6.578	76.094	76.943	L141	P		
-13.924	-11.588	6.411	-0.213	77.955	78.762		-8.358	-8.358	-10.409	-2.466	81.966	81.192	L141	W		
-13.209	-12.992	-13.604	-18.938	46.621	39.269		-16.483	-16.724	-15.419	-9.807	45.375	47.641	L141	S		
2.017	-12.679	17.358	-0.65	81.34	81.613		-3.991	-1.374	-0.73	-2.371	82.913	83.961	L141	Q		
6.581	6.482	10.205	3.21	79.956	80.925		2.068	8.839	3.963	2.189	81.251	83.493	L141	T		
12.471	13.496	21.159	28.979	82.98	81.339		4.904	3.578	3.975	8.158	81.998	83.118	L141	N		
13.864	-9.402	-2.934	3.539	50.15	55.995		14.257	5.757	11.061	-1.698	59.531	73.837	L141	R		
-5.771	-5.291	12.381	33.648	79.734	79.042		-0.776	-5.077	-8.476	-0.473	72.949	79.035	L141	E		
11.192	3.201	81.67	82.165	84.173	84.335		38.957	25.629	82.631	81.522	84.726	86.287	S170	H		
-22.905	-15.989	-16.504	-21.682	33.502	41.022		-14.593	13.683	-14.843	-13.437	57.972	63.768	S170	W		
3.275	-10.445	-0.667	1.713	84.151	84.048		-1.687	-2.608	7.34	10.4	85.172	85.579	S170	Q		
-5.373	-11.513	-9.324	-13.032	80.599	80.6		-7.494	-7.053	46.106	40.447	82.797	83.098	S170	E		
5.221	-4.603	16.953	28.141	81.696	80.905		4.698	-1.749	11.789	17.696	84.217	84.869	S170	Y		
-21.249	-14.111	-10.647	-7.801	-7.501	-8.948		-8.018	-7.181	-12.816	-11.102	51.421	38.587	W171	Y		
-12.279	-7.063	10.489	10.903	65.278	65.082		-4.409	2.36	-3.487	1.758	84.512	85.125	W171	G		
-14.827	-9.137	19.264	16.722	82.573	82.967		-6.179	-3.142	-8.695	-2.587	82.237	83.738	W171	A		
-3.108	4.167	6.539	2.325	82.783	82.436		1.134	7.727	4.21	4.561	81.279	82.561	W171	P		
-0.578	-7.464	-13.86	-10.027	51.093	45.709		-0.52	-0.832	-0.806	2.59	85.093	86.072	W171	F		
-20.222	-20.614	-21.619	-17.539	80.035	80.976		-8.675	-8.674	-15.45	-10.811	42.831	47.109	W171	S		

SEQ ID 33
variants

SEQ ID 33
variants

Fig. 8E**Acetylcholine**

AZD-0328

10uM	10uM	100uM	100uM	3mM	3mM	100nM	100nM	300nM	30uM	30uM	Amino acid	Mutation
-20.939	-25.862	-23.938	-21.543	79.518	81.40	-19.482	-17.857	-21.478	35.504	38.667	W171	C
-13.758	-15.723	-14.94	-15.098	34.761	44.392	-10.403	-6.673	-9.925	59.182	63.933	W171	H
-1.307	-6.802	-11.454	-11.715	-6.212	-6.254	-14.425	-12.176	-11.376	72.943	73.637	S172	F
5.548	6.225	-0.929	3.712	4.57	7.005	-3.692	-3.559	-2.051	79.285	78.323	S172	Y
-9.919	-0.322	-6.855	-4.777	3.286	10.219	1.693	-5.194	-4.127	82.664	82.583	S172	R
-12.007	36.799	50.377	59.762	68.877	71.356	-15.691	-14.212	17.526	74.852	78.018	S172	C
-22.746	5.089	67.716	74.271	81.923	81.877	-5.341	5.689	73.152	83.474	84.51	S172	I
-2.225	25.749	43.459	47.542	83.184	81.112	10.982	5.745	74.331	85.261	84.203	S172	M
-20.96	10.264	-0.529	10.642	79.643	79.46	-5.869	1.287	11.204	83.322	82.381	S172	L
4.31	-2.372	-7.45	-8.386	65.421	64.811	-7.972	-7.39	-4.425	85.128	85.347	S172	Q
-5.542	-7.128	-14.167	-11.096	28.796	34.956	-6.669	-8.587	-7.332	78.607	81.681	S172	N
-8.731	-4.849	7.136	23.677	80.431	81.702	-9.804	-11.879	23.113	81.04	82.432	S172	H
8.684	3.132	1.897	6.645	83.475	83.485	-3.573	-0.184	45.957	83.364	83.802	S172	G
-5.709	0.559	4.65	-1.753	81.936	81.749	9.206	6.452	70.477	84.963	84.183	S172	K
-3.309	-1.338	10.076	-12.482	39.576	51.528	1.958	5.27	13.825	54.864	54.803	Y210	A
-2.266	1.69	-0.979	5.626	81.399	81.815	6.027	3.222	3.042	82.945	82.043	Y210	F
-10.815	0.332	21.567	13.032	80.677	83.43	-0.902	-5.949	-2.575	81.97	82.518	Y210	W
-11.503	-14.064	-13.546	-2.495	6.126	2.213	-4.725	2.181	-3.915	52.008	6.229	C212	A
-7.332	-10.326	-12.268	-3.379	17.006	18.174	-7.04	-1.566	-5.734	72.38	57.485	C212	L
6.585	5.589	-0.008	-3.116	47.291	43.523	-1.325	0.722	3.167	7.169	15.025	C212	F
12.279	1.411	9.231	2.788	74.213	61.215	6.167	-0.048	3.801	15.61	18.506	C212	Y
12.564	3.313	4.314	-0.473	78.52	64.032	-0.76	2.674	4.247	14.065	18.231	C212	K
8.903	7.462	9.323	8.482	49.054	33.678	4.729	6.543	8.051	10.621	6.259	C212	H
4.621	5.49	-0.583	3.482	70.361	73.423	3.563	2.69	1.302	81.954	82.422	C212	I
10.329	10.394	8.619	12.291	59.368	61.671	4.763	9.847	10.472	81.723	82.175	C212	V
1.907	8.11	2.19	5.586	80.793	83.405	2.532	4.375	3.642	29.117	40.462	C212	P
5.72	7.741	4.457	-0.297	49.271	57.819	2.202	4.165	2.686	56.807	57.796	C212	M
-0.117	0.65	0.512	2.504	78.465	78.422	-1.09	0.908	-0.793	28.376	28.168	C212	W

SEQ ID 33
variants

Fig. 8F

Acetylcholine

AZD-0328

10uM	10uM	100uM	100uM	3mM	3mM	100nM	100nM	300nM	300nM	30uM	30uM	Amino acid	Mutation
5.409	2.45	1.03	-2.647	82.106	80.823	-3.801	-2.106	-0.823	-1.668	81.552	80.25	C212	R
4.368	3.2	0.572	-2.178	58.541	47.818	-5.339	-4.771	-3.892	-2.109	9.586	10.13	C213	M
-3.416	-5.101	-4.998	-5.53	34.524	32.807	-6.779	-3.835	-7.064	-9.753	37.308	35.2	C213	A
-1.892	-4.131	-3.661	-3.069	78.843	75	-2.647	-2.928	-2.169	-3.848	29.477	31.802	C213	L
-6.662	-3.921	-0.819	-2.555	62.32	40.203	-6.345	-1.448	-4.341	-4.95	50.598	45.819	C213	I
2.662	4.034	2.682	-3.012	70.628	65.41	5.357	9.696	3.692	-0.129	50.634	54.23	C213	V
1.127	-2.39	-5.781	-4.103	31.507	21.781	0.213	3.285	4.52	1.009	40.828	48.876	C213	P
11.643	11.455	7.928	4.849	76.326	74.619	1.938	3.638	7.285	5.183	78.054	77.832	C213	F
7.54	-1.394	0.407	0.747	49.088	48.747	6.157	-3.88	-4	-3.449	59.292	65.984	C213	W
7.671	10.741	69.427	70.863	81.904	81.608	0.89	2.036	28.977	31.636	83.335	82.83	Y217	F
12.817	7.866	8.275	5.87	37.682	41.026	-1.003	4.238	5.748	0.567	5.531	12.718	Y217	T
8.228	-7.418	-9.12	3.641	72.373	70.304	3.415	3.103	-2.895	-2.678	51.291	43.963	Y217	A
6.088	4.604	1.205	5.032	76.484	76.494	4.414	5.839	-0.973	1.777	61.923	57.389	Y217	I
8.495	14.772	6.807	3.753	80.344	80.132	2.083	1.164	3.446	3.511	43.599	38.8	Y217	V
8.238	9.36	8.037	3.462	27.066	33.39	1.892	6.5	2.421	6.416	24.222	15.967	Y217	M
5.859	8.696	33.675	28.62	80.358	81.852	-0.294	2.989	12.479	12.674	83.032	81.63	Y217	W
11.601	7.001	10.467	11.496	79.492	77.42	2.128	-5.95	-4.137	3.289	76.35	74.002	Y217	S
7.612	6.716	7.242	6.051	28.765	29.987	9.808	1.758	7.648	3.035	22.721	23.829	Y217	Q
10.391	7.529	4.732	-1.185	51.361	49.396	-5.658	-4.647	-5.358	-1.793	41.694	28.869	Y217	C
15.492	1.445	-1.907	0.818	20.874	18.309	5.052	3.559	4.285	7.826	31.33	30.912	Y217	H

SEQ ID 33
variants

Fig. 8G

Acetylcholine												AZD-0328			
10uM	10uM	100uM	100uM	3mM	3mM	100nM	100nM	100nM	300nM	300nM	30uM	30uM	30uM	Amino acid	Mutation
18.703	18.97	81.891	82.035	81.984	82.13	79.11	80.725	82.334	82.432	82.48	83.045				
1.96	-4.029	-5.912	-5.452	-3.158	-3.083	-5.328	-8.836	-8.052	-8.739	-7.297	-1.287				
19.297	31.763	80.445	78.98	81.833	82.4	-8.336	-11.601	-8.988	-7.23	79.324	78.054	W77		M	
12.41	9.124	58.803	54.254	80.193	79.498	5.85	3.792	-9.389	10.658	5.074	10.509	Y115		W	
79.15	82.404	83.622	83.394	83.959	84.006	41.68	18.698	81.264	82.772	85.147	85.072	S172		T	
-12.007	36.799	50.877	59.762	68.877	72.358	45.691	14.212	17.526	23.618	74.852	78.018	S172		C	

Fig. 8H

Acetylcholine												AZD-0328			
10uM	10uM	100uM	100uM	3mM	3mM	100nM	100nM	100nM	300nM	300nM	30uM	30uM	30uM	Amino acid	Mutation
13.204	23.203	82.696	81.283	81.498	82.087	80.057	81.348	83.297	83.584	83.186	83.748				
-8.106	-4.64	-9.936	-5.991	-6.095	-8.164	-10.757	-7.938	-11.334	-9.065	-8.169	-12.073				
-7.125	5.087	-7.962	-5.152	69.506	68.092	42.897	44.726	69.607	71.078	81.283	81.583	L131		S	
-9.899	0.435	-7.867	-3.572	45.303	51.016	17.766	13.983	52.577	44.526	82.08	81.721	L131		T	
6.046	7.12	22.528	16.578	80.094	79.979	67.253	64.242	78.531	76.476	80.1	77.783	L131		D	
1.864	-0.236	3.597	4.693	80.257	80.972	68.213	68.78	81.873	82.222	83.35	81.853	S172		D	

Fig. 8I

AZD-0328

Acetylcholine

10uM	10uM	100uM	100uM	3mM	3mM	100nM	100nM	300nM	300nM	30uM	30uM	Amino acid	Mutation
	-13.598	80.556	80.523	81.799	80.023	75.809	75.083	82.168	81.272	83.97	83.231		
	-18.801	-22.353	-23.181	-20.184	-19.012	-22.549	-15.958	-18.27	-18.188	-17.063	-17.738		
29.328	35.169	81.623	82.767	82.878	82.463	82.163	82.858	83.026	83.095	83.53	82.227	L131	N
59.073	57.417	79.356	79.527	78.495	79.237	19.003	20.434	72.357	74.723	81.53	81.243	L141	I
79.595	81.343	82.86	82.253	84.409	83.801	84.1	83.863	84.37	84.565	85.578	85.548	S170	G
86.289	85.498	85.634	85.63	85.984	85.633	87.386	86.693	86.375	87.03	87.06	87.388	S170	A
79.31	79.146	85.175	85.128	85.678	85.833	87.243	87.355	87.721	87.808	87.673	88.67	S170	L
42.719	46.386	85.087	85.489	86.931	87.384	85.519	85.659	86.888	87.735	87.608	87.044	S170	I
80.341	82.597	86.065	86.792	86.857	86.99	87.635	87.844	87.836	88.736	87.833	89.337	S170	V
81.823	83.297	83.852	84.919	84.577	85.1	86.2	87.259	86.858	86.969	87.041	87.829	S170	P
77.673	79.674	84.842	85.579	85.675	86.858	86.566	86.716	86.732	87.727	87.617	87.147	S170	F
80.334	82.543	85.589	86.193	85.794	85.729	86.701	86.959	86.715	87.498	86.913	87.274	S170	M
85.772	85.39	85.684	85.682	85.978	86.239	86.818	86.983	87.121	87.744	87.303	87.795	S170	T
80.759	82.478	81.442	80.404	81.512	82.113	82.899	83.442	82.974	83.497	82.304	83.38	S170	C
79.15	82.303	85.652	83.304	83.939	84.006	41.68	18.698	81.264	82.772	85.127	85.072	S172	T
	72.897	80.133	77.691	81.896	73.77	65.288	69.259	81.668	80.95	81.742	81.69	S188	I
	78.593	79.865	80.592	82.471	83.909	67.308	70.233	82.565	83.832	83.346	83.637	S188	V
	69.29	77.428	76.634	81.094	82.623	14.512	16.915	80.882	80.358	83.183	82.03	S188	P
	74.25	79.108	80.983	81.949	82.07	46.631	51.182	82.764	83.37	83.449	81.4	S188	F
	76.013	81.415	81.074	83.443	82.197	57.026	62.061	82.63	83.163	83.935	82.769	S188	M
	70.38	75.335	76.721	79.045	75.89	14.642	17.576	74.121	75.832	81.009	79.91	S188	W
	77.141	81.645	82.152	83.9	82.733	56.645	58.266	81.206	82.651	84.783	84.593	S188	Q
30.728	89.036	82.283	81.624	83.36	83.241	79.091	78.134	83.353	83.775	84.58	82.484	S188	T

SEQ ID 33
SEQ ID 29SEQ ID 33
variants

Fig. 9A

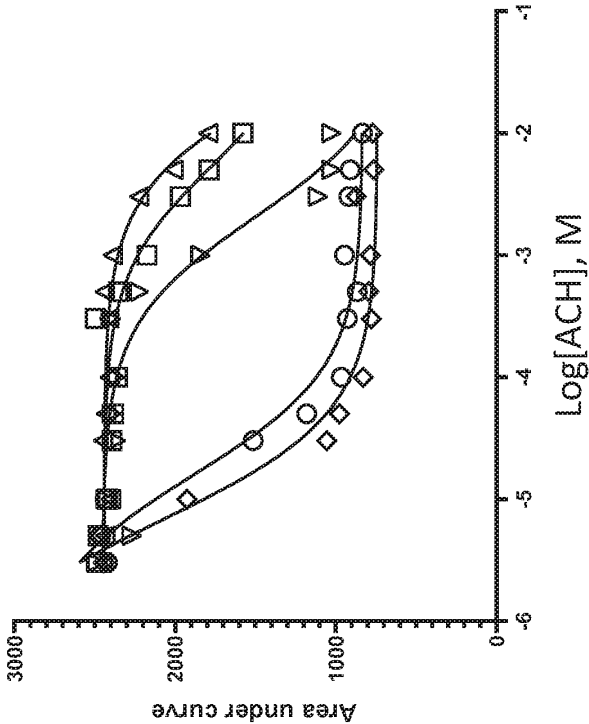
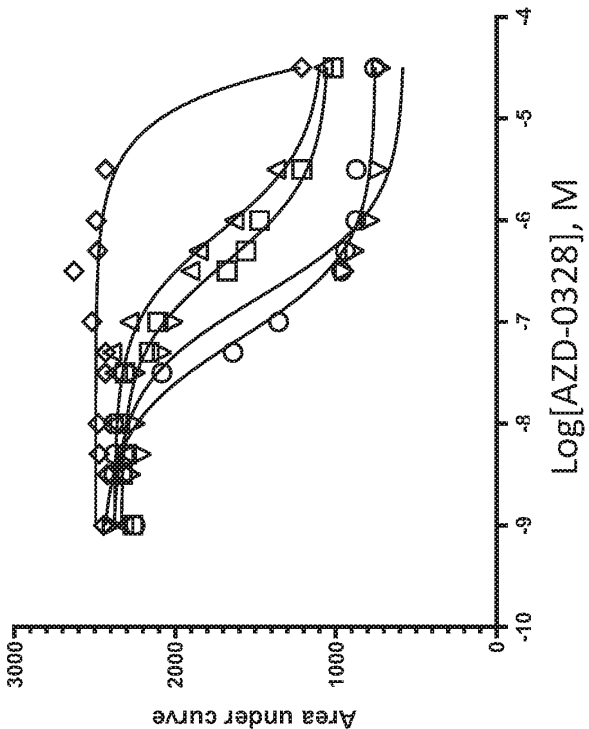


Fig. 9B



- SEQ ID NO:33
- ◻ SEQ ID NO:33 + L131S
- △ SEQ ID NO:33 + L131T
- ▽ SEQ ID NO:33 + S172D
- ◇ SEQ ID NO:33 + W77M

Fig. 10A

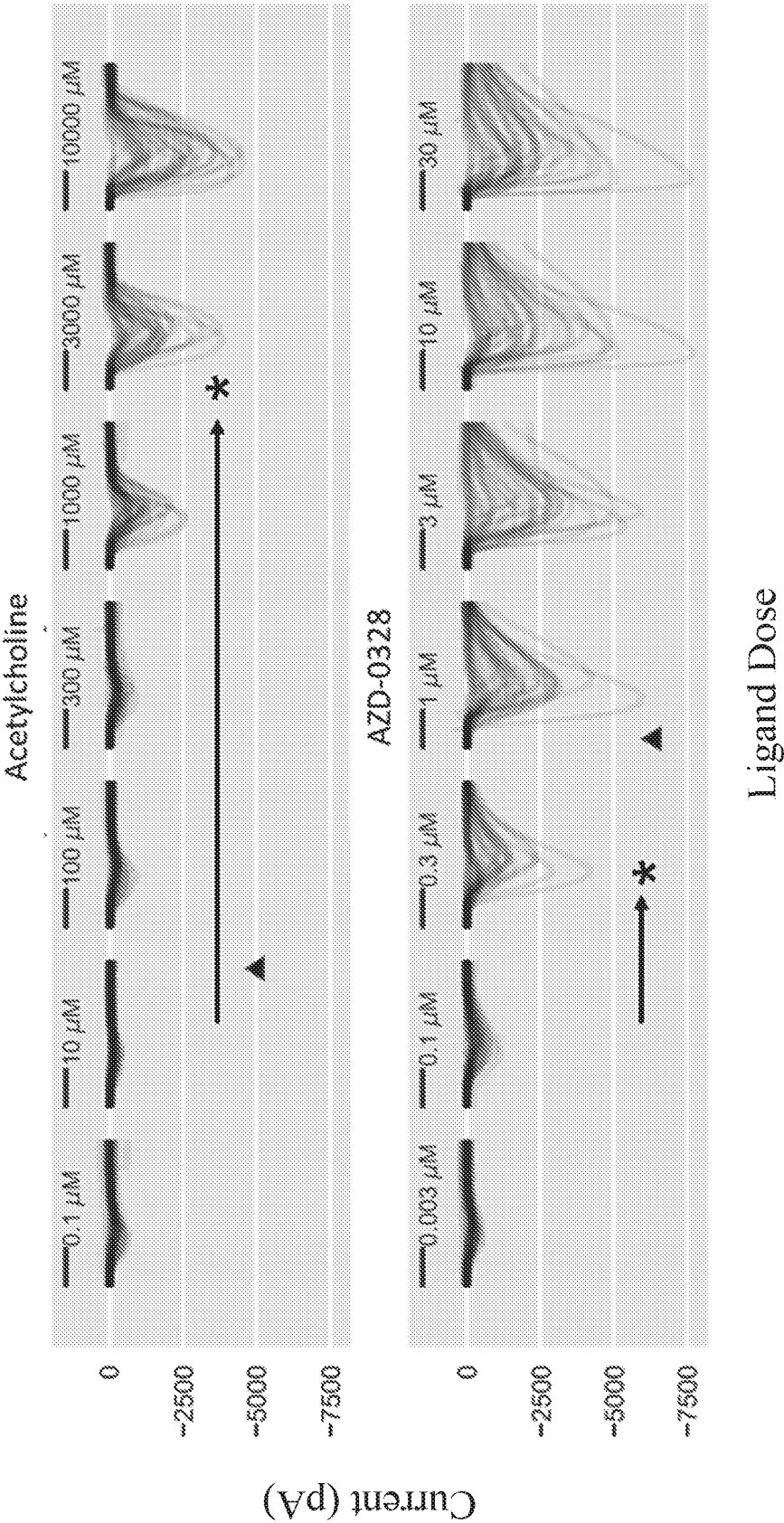


Fig. 10B

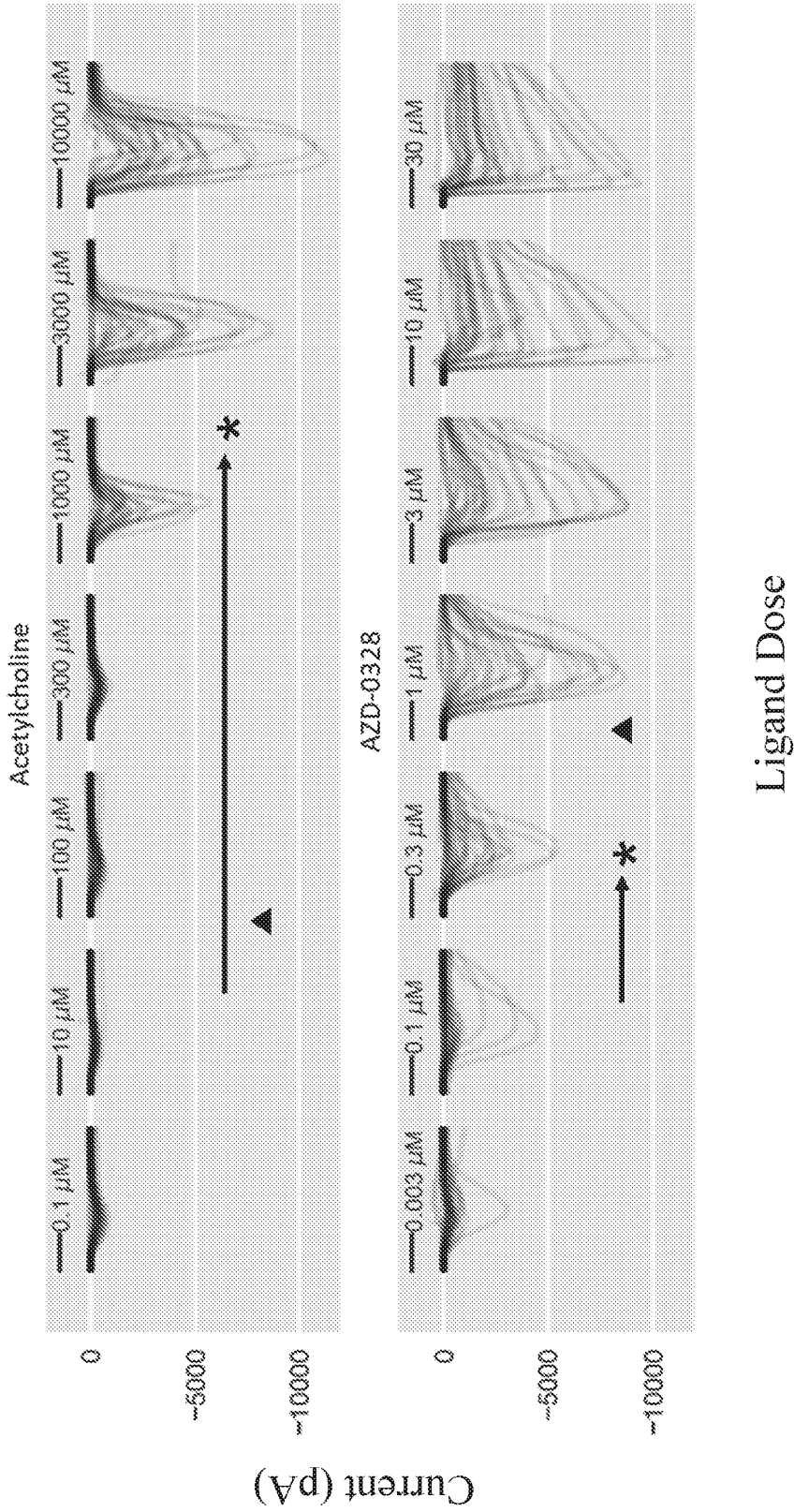


Fig. 10C

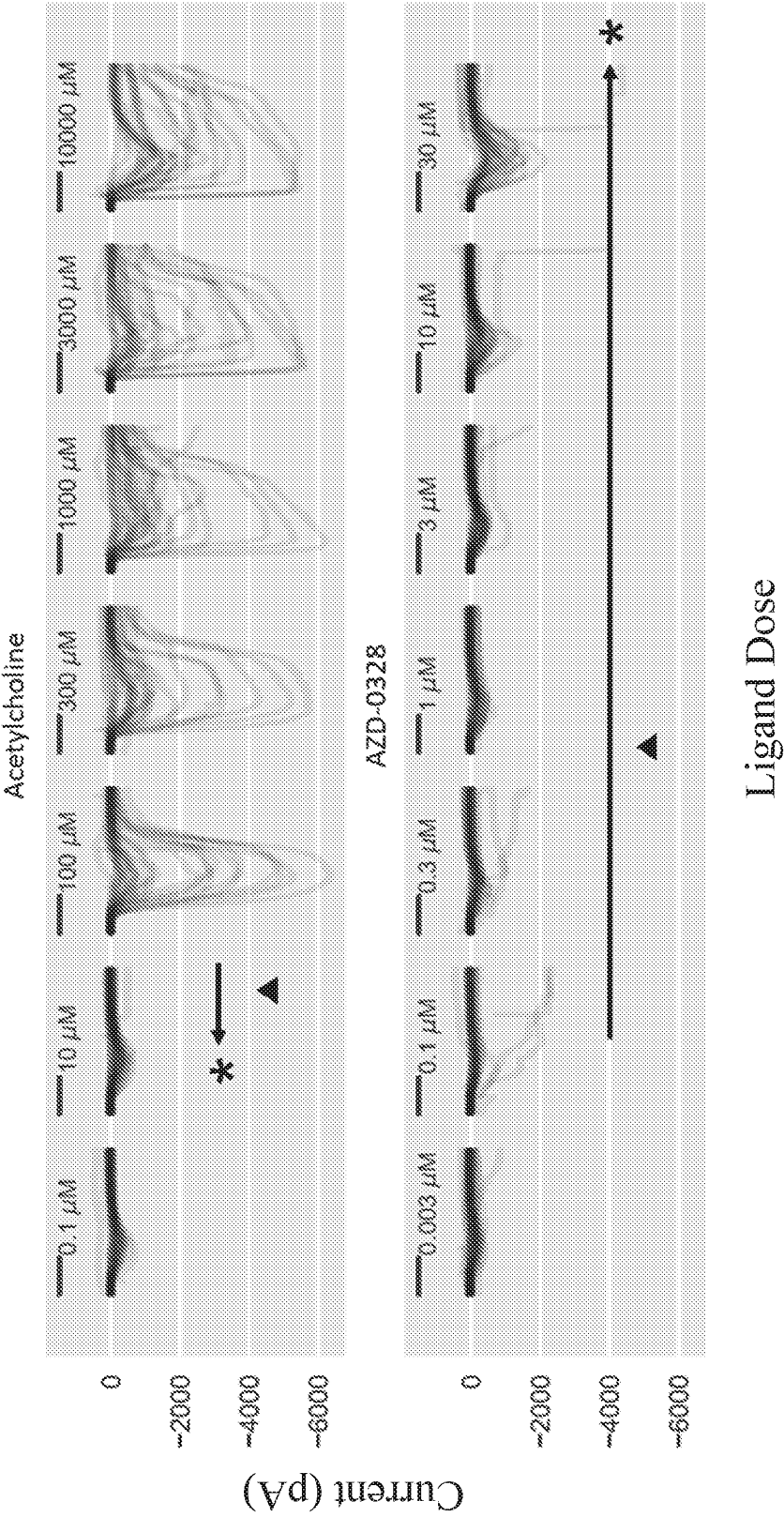


Fig. 10D

