

**Table S1.** Acute OL differentiation hit compounds tested in the IFN $\gamma$  protection assay.

Compound	Drug Class	Viability (AB) EC <sub>50</sub> [ $\mu$ M]	OL diff (MBP) EC <sub>50</sub> [ $\mu$ M]
Raloxifene	Hormone	0.036	0.0034
Toremifene		0.049	0.014
Tamoxifen		0.039	0.017
Perphenazine	Tricyclic anti-depressants	0.057	0.035
Fluphenazine		0.041	0.012
Prochlorperazine		0.049	0.016
Trifluoperazine		0.054	0.015
Quetiapine		0.13	0.074
Perospirone		0.12	0.012
Nitalapram/Citalopram		0.52	-
Escitalopram	Non-Tricyclic anti-depressants	0.66	0.54
Metylperon		4.2	1.3
Bupropion		7.1	1.3
Clemastine fumarate		0.053	0.44
Cogentin/Benztropine		0.014	0.04
Donepezil	Muscarinic	0.53	0.3
Vesamicol		2.9	0.019
Oxybutynin		0.37	0.13
Ipratropium		0.23	0.028
Salmeterol		0.28	0.075
Betaxolol	Adrenergic	2.2	0.19
Esmolol		-	-
Ifenprodil		0.4	0.24
Benproperine	Ion Channel	0.52	0.072
Proxymetacaine		2	0.094
Dofetilide		-	-
DMPP**		160	0.89
Bifonazole	Anti-fungal	0.46	0.13
Clotrimazole		0.66	-
Ketoconazole		0.43	-

\*\*Dimethylphenylpiperazinium