METAINFO

GENE-SET
REACTOME_PRESYNAPTIC_NICOTINIC_ACETYLCHOLINE_RECEPTORS
REACTOME_ACETYLCHOLINE_BINDING_AND_DOWNSTREAM_EVENTS
REACTOME_HIGHLY_CALCIUM_PERMEABLE_POSTSYNAPTIC_NICOTINIC_ACETYLCHOLINE_RECEPTORS
REACTOME_TRANSMISSION_ACROSS_CHEMICAL_SYNAPSES
HOOI_ST7_TARGETS_UP
REACTOME_NEUROTRANSMITTER_RECEPTOR_BINDING_AND_DOWNSTREAM_TRANSMISSION_IN_THE_POSTSYNAPTIC_CELL
NICOTINIC_ACETYLCHOLINE_ACTIVATED_CATION_SELECTIVE_CHANNEL_ACTIVITY
NICOTINIC_ACETYLCHOLINE_GATED_RECEPTOR_CHANNEL_COMPLEX
REACTOME_SIGNALING_BY_FGFR1_FUSION_MUTANTS
REACTOME_REGULATION_OF_SIGNALING_BY_CBL
GSE12366_GC_BCELL_VS_PLASMA_CELL_UP
NIKOLSKY_BREAST_CANCER_15Q26_AMPLICON
AMINE_BINDING
GSE17721_LPS_VS_CPG_2H_BMDM_UP
V$FOXO3_01
SENESE_HDAC2_TARGETS_UP
KEGG_OLFACTORY_TRANSDUCTION
SHETH_LIVER_CANCER_VS_TXNIP_LOSS_PAM1
VANOEVELEN_MYOGENESIS_SIN3A_TARGETS
KEGG_FOCAL_ADHESION
ACETYLCHOLINE_BINDING
REACTOME_NEURONAL_SYSTEM
BIOCARTA_GLEEVEC_PATHWAY
CHIARADONNA_NEOPLASTIC_TRANSFORMATION_KRAS_CDC25_DN
FARMER_BREAST_CANCER_CLUSTER_8
KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS
GSE2706_LPS_VS_R848_AND_LPS_2H_STIM_DC_DN
KATSANOU_ELAVL1_TARGETS_UP
YAO_TEMPORAL_RESPONSE_TO_PROGESTERONE_CLUSTER_9
REACTOME_APC_C_CDH1_MEDIATED_DEGRADATION_OF_CDC20_AND_OTHER_APC_C_CDH1_TARGETED_PROTEINS_IN_LATE_MITOSIS_EARLY_G1
REACTOME_DESTABILIZATION_OF_MRNA_BY_AUF1_HNRNP_D0
KANG_AR_TARGETS_UP
NIKOLSKY_BREAST_CANCER_16Q24_AMPLICON
REACTOME_SIGNALING_BY_HIPPO
GSE36476_CTRL_VS_TSST_ACT_16H_MEMORY_CD4_TCELL_OLD_DN

POTASSIUM_CHANNEL_REGULATOR_ACTIVITY
GCCNNNWTAAR_UNKNOWN
ZWANG_EGF_PERSISTENTLY_UP
REACTOME_CDT1_ASSOCIATION_WITH_THE_CDC6_ORC_ORIGIN_COMPLEX
V$EGR1_01
MODY_HIPPOCAMPUS_POSTNATAL
GSE20366_CD103_POS_VS_CD103_KLRG1_DP_TREG_DN

	Discovery									
	COPDGene				GenKOLS				Combined	
N_all	N	Ncorr	P	Pcorr	N	Ncorr	P	Pcorr	P	Pcorr
12	12	9	3.2E-04	0.11	12	9	0.0066	0.12	2.8E-05	0.10
16	14	11	5.4E-04	0.11	14	11	0.0056	0.094	4.3E-05	0.088
13	11	8	0.0024	0.34	11	8	0.0055	0.12	2.1E-04	0.35
186	172	169	0.0029	0.015	172	169	0.0060	0.016	2.8E-04	0.0033
94	80	80	0.0050	0.0050	80	80	0.031	0.031	0.0016	0.0016
137	126	123	0.0053	0.032	126	123	0.016	0.043	0.0010	0.014
11	11	9	0.0083	0.268	11	9	0.016	0.11	0.0017	0.26
11	11	9	0.0083	0.268	11	9	0.016	0.11	0.0017	0.26
19	18	18	0.011	0.011	18	18	0.006	0.0059	0.0013	0.0013
18	18	18	0.012	0.012	18	18	0.035	0.035	0.0043	0.0043
200	177	177	0.013	0.013	177	177	0.0054	0.0054	0.0014	0.0014
22	21	21	0.014	0.014	21	21	0.0085	0.0085	0.0020	0.0020
23	21	18	0.015	0.340	21	18	0.027	0.19	0.0046	0.43
200	188	188	0.016	0.016	187	187	0.030	0.030	0.0052	0.0052
245	226	226	0.017	0.017	226	226	0.030	0.030	0.0054	0.0054
114	110	110	0.017	0.017	110	110	0.0040	0.0040	0.0016	0.0016
389	356	356	0.018	0.018	357	357	0.043	0.043	0.0078	0.0078
229	213	213	0.019	0.019	213	213	0.012	0.012	0.0035	0.0035
220	211	211	0.020	0.020	211	211	0.0075	0.0075	0.0028	0.0028
201	191	191	0.025	0.025	191	191	0.013	0.013	0.0052	0.0052
17	17	14	0.026	0.52	17	14	0.0086	0.104	0.0042	0.56
279	262	259	0.027	0.074	262	259	0.045	0.082	0.012	0.052
23	23	23	0.030	0.030	23	23	0.035	0.035	0.011	0.011
51	47	47	0.030	0.030	47	47	0.0085	0.0085	0.0050	0.0050
7	7	7	0.033	0.033	7	7	0.023	0.023	0.010	0.0099
140	121	121	0.034	0.034	122	122	0.050	0.050	0.016	0.016
200	137	136	0.034	0.058	137	136	0.0022	0.0032	0.003	0.0069
169	160	160	0.035	0.035	160	160	0.026	0.026	0.011	0.011
76	71	71	0.037	0.037	71	71	0.033	0.033	0.014	0.014
72	62	62	0.037	0.037	62	62	0.041	0.041	0.016	0.016
53	49	49	0.038	0.038	49	49	0.041	0.041	0.017	0.017
17	15	15	0.039	0.039	15	15	0.0030	0.0030	0.0039	0.0039
53	**50**	**50**	**0.040**	**0.040**	**50**	**50**	**0.0092**	**0.0092**	**0.0073**	**0.0073**
22	19	19	0.041	0.041	19	19	0.0071	0.0071	0.0065	0.0065
200	192	192	0.041	0.041	192	192	0.029	0.029	0.014	0.014

14	13	13	0.042	0.042	13	13	0.0025	0.0025	0.0040	0.0040
149	134	134	0.042	0.042	134	134	0.028	0.028	0.015	0.015
32	29	29	0.045	0.045	29	29	0.0071	0.0071	0.0075	0.0075
56	53	53	0.046	0.046	53	53	0.047	0.047	0.022	0.022
269	**251**	**251**	**0.047**	**0.047**	**251**	**251**	**0.0034**	**0.0034**	**0.0054**	**0.0053**
63	58	58	0.049	0.049	58	58	0.046	0.046	0.023	0.023
200	187	187	0.049	0.048	187	187	0.045	0.045	0.023	0.022

Replication			
ECLIPSE			
N	Ncorr	P	Pcorr
12	9	0.87	0.96
14	11	0.84	0.94
11	8	0.75	0.90
172	169	0.46	0.50
80	80	0.79	0.79
126	123	0.68	0.73
11	9	0.92	0.96
11	9	0.92	0.96
18	18	0.69	0.69
18	18	0.15	0.15
177	177	0.94	0.94
21	21	0.076	0.076
21	18	0.44	0.57
188	188	0.52	0.52
226	226	0.032	0.031
110	110	0.26	0.26
359	359	0.83	0.82
213	213	0.43	0.43
212	212	0.54	0.54
191	191	0.15	0.15
17	14	0.62	0.76
262	259	0.93	0.94
23	23	0.31	0.31
47	47	0.59	0.59
7	7	0.22	0.22
122	122	0.70	0.69
137	136	0.39	0.39
160	160	0.69	0.69
71	71	0.22	0.22
62	62	0.43	0.43
49	49	0.39	0.39
15	15	0.14	0.14
50	**50**	**0.0062**	**0.0062**
19	19	0.95	0.95
192	192	0.30	0.30

13	13	0.92	0.92
134	134	0.17	0.16
29	29	0.88	0.88
53	53	0.32	0.32
251	**251**	**0.022**	**0.021**
58	58	0.29	0.28
187	187	0.90	0.90

METAINFO				Discovery			
				COPDGene			
GENE	**CHR**	**START**	**STOP**	**N**	**Min P**	**Gene P**	**N**
CHRNA1	2	175612320	175629200	37	0.17	0.50	36
CHRNA2	8	27317279	27337400	71	0.042	0.84	71
CHRNA3	***15***	***78885394***	***78913637***	***54***	***1.3E-08***	***1.7E-05***	***54***
CHRNA4	20	61975420	62009753	36	0.048	0.80	35
CHRNA5	***15***	***78857862***	***78887611***	***44***	***4.7E-08***	***0.0011***	***44***
CHRNB2	1	154540257	154552502	22	0.15	0.41	22
CHRNB3	8	42552519	42592550	37	0.012	0.18	38
CHRNB4	***15***	***78916461***	***79012628***	***81***	***1.3E-08***	***1.0E-06***	***82***
CHRND	2	233390703	233401377	25	0.018	0.16	25
CHRNE	17	4801069	4806369	19	0.012	0.067	19
CHRNG	2	233404437	233412546	29	0.013	0.063	29
CHRNA6	8	42607763	42651535	28	0.022	0.085	30

y			Replication		
GenKOLS		Combined		ECLIPSE	
Min P	Gene P	Gene P	N	Min P	Gene P
0.10	0.50	0.99	39	0.075	0.16
3.4E-04	0.33	0.51	75	0.010	0.86
3.8E-04	***0.0027***	**6.5E-07**	60	0.059	0.17
0.073	0.74	0.29	36	0.068	0.70
2.6E-04	***0.0093***	**1.3E-04**	52	0.059	0.25
0.078	0.23	0.58	23	0.093	0.79
0.052	0.079	0.14	39	0.17	0.57
7.1E-04	***0.0080***	**1.0E-07**	86	0.16	0.52
0.078	0.21	0.21	27	0.12	0.96
0.030	0.50	0.19	20	0.17	0.89
0.078	0.33	0.12	33	0.11	0.43
0.038	0.15	0.089	32	0.077	1