

Table 2. Neuropeptides, channels, and growth-associated proteins expressed in control DRG and axotomized DRG

Accession no.	Gene name	cDNA array(14d)		Accession no.	Gene name	cDNA array(14d)	
		Con (nVol)	Axo (nVol)			Con (nVol)	Axo (nVol)
Neuropeptide				U35174	Sodium channel SHRSPHD beta subunit	0.019	0.018
V01231	Calcitonin gene-related peptide	0.922	0.391	X77933	Sodium channel SHRSPHD gamma subunit	0.010	0.015
S70690	Cholecystokinin	0.021	0.254	X70521	Amiloride sensitive sodium channel alpha subunit	0.011	0.013
J03624	Galanin	0.021	0.624	X92184	Voltage-gated sodium channel (SNS)	0.084	0.031
M31176	Gastrin-releasing peptide precursor	0.011	0.013	AF000368	Voltage-gated sodium channel	1.457	1.018
M29712	Melanin-concentrating hormone	0.006	0.008	Y09164	Voltage-gated sodium channel (atypical)	0.283	0.266
NM_012994	Neurexophilin 1	0.298	0.383	AF049239	Voltage-gated sodium channel rPN4	1.048	0.783
M16410	Neurokinin B precursor	0.284	0.237	M28647	Na ⁺ , K ⁺ -ATPase alpha-1 subunit	0.145	0.121
M94555	Neuromedin U-23 precursor	0.007	0.013	NM_012505	ATPase, Na ⁺ /K ⁺ transporting, alpha 2 polypeptide	0.721	0.832
M20373	Neuropeptide Y	0.008	2.441	J02701	Na ⁺ , K ⁺ -ATPase beta subunit	1.600	1.690
M17523	Peptide YY precursor	0.008	0.014	NM_013113	ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide	0.351	0.614
M63006	Pituitary adenylate cyclase activating polypeptide	0.056	0.104	NM_012913	ATPase, Na ⁺ /K ⁺ transporting, beta 3 polypeptide	0.408	0.284
NM_012659	Somatostatin	0.413	0.152	X70062	Na ⁺ , K ⁺ -ATPase gamma subunit	2.030	2.180
M15191	Tachykinin	2.872	1.212	AF071863	Bumetanide-sensitive Na-K-2Cl cotransporter	0.262	0.407
X02341	Vasoactive intestinal polypeptide	0.011	0.152	AF051561	Na-K-Cl cotransporter	0.623	0.340
Channel				AF125160	Na-G/SCL-11 ion channel	0.975	0.521
NM_031353	Voltage dependent anion channel 1	1.284	1.503	D17695	Water channel aquaporin 3	0.324	0.313
NM_031354	Voltage dependent anion channel 2	0.134	0.147	U14007	Water channel, aquaporin 4	0.010	0.010
AF268469	Voltage dependent anion channel 3	0.939	1.061	D13906	ADH water channel	0.016	0.015
J05087	Ca ²⁺ -transporting ATPase	0.095	0.073	Growth-associated protein			
BG668716	ATPase, Ca ²⁺ transporting, plasma membrane 1	0.267	0.404	D38629	Adenomatous polyposis coli orotein	0.012	0.034
M64373	Calcium channel, alpha 1A subunit	0.039	0.042	X17457	Ciliary neurotrophic factor	0.974	1.336
M59786	Calcium channel, alpha 1C subunit	0.072	0.054	U13253	DA11=15.2 kDa fatty acid binding protein	0.751	2.214
M57682	Calcium channel, alpha 1D subunit	0.008	0.012	M22427	Basic fibroblast growth factor	0.047	0.095
M92905	Calcium channel, alpha 1 beta	0.020	0.025	NM_012513	Brain derived neurotrophic factor	0.461	0.686
M86621	L-type calcium channel, alpha 2/delta-1 subunit	0.023	0.139	U95001	Developmentally-regulated cardiac factor	1.122	0.429
X61394	Calcium channel, beta subunit	0.012	0.013	D64085	Fibroblast growth factor 5	0.020	0.021
AF013598	Proton gated cation channel drasic	0.264	0.143	X56551	Fibroblast growth factor 7	0.092	0.228
Z67744	Chloride channel CIC-7	0.031	0.032	D14839	Fibroblast growth factor 9	0.010	0.010
D17521	Protein kinase C regulated chloride channel	0.045	0.054	D79215	Fibroblast growth factor 10	0.463	0.465
D13985	Chloride channel RCL1	0.032	0.030	AF271786	Fibroblast growth factor 13	4.441	1.320
BG663996	Chloride intracellular channel 4	0.041	0.034	BG666531	Fibroblast growth factor 14	0.182	0.244
M77482	Potassium channel CDRK	0.016	0.015	BG662950	Fibroblast growth factor homologous factor 1	0.334	0.372
M74449	Potassium channel cardiac delayed rectifier	0.025	0.028	L15305	Glia cell line-derived neurotrophic factor	0.014	0.021
X16476	Potassium channel drk1	0.240	0.170	BG666787	Glia maturation factor-gamma	0.209	0.316
M22412	Potassium channel protein(put.)	0.095	0.167	L32591	Growth arrest and DNA-damage-inducible protein 45	0.012	0.084
X83580	Potassium channel, inward rectifier 11	0.091	0.023	M16228	Growth associated protein 43	0.273	1.624
L29403	Epithelial potassium channel	0.034	0.042	L05489	Heparin-binding EGF-like growth factor	0.011	0.012
L35771	Potassium channel subfamily IKAch	0.027	0.026	M55601	Heparin-binding growth associated molecule	2.523	2.557
D42145	ATP-sensitive potassium channel uKATP-1	0.016	0.015	X14232	Heparin-binding growth factor 1	0.022	0.031
X83583	Potassium channel-like protein KATP	0.021	0.013	S43941	Insulin-like growth factor I	0.634	0.475
X97041	Potassium channel Kir6.2	0.039	0.060	M89791	Insulin-like growth factor binding protein 1	0.124	0.112
M26161	Potassium channel protein	0.027	0.028	M31837	Insulin-like growth factor binding protein 3	0.044	0.031
M68880	Voltage gated potassium channel KV3.1	0.012	0.012	BG664716	Mast cell growth factor	0.307	0.257
X62841	Voltage gated potassium channel KV3.4	0.020	0.026	S73424	Macrophage migration inhibitory factor	0.793	1.228
U89873	Voltage gated potassium channel Kv4.1 like protein	0.096	0.157	M36589	Beta nerve growth factor	0.192	0.195
X17621	Potassium channel RCK2	0.014	0.012	S83440	Prepronerve growth factor homolog	0.173	0.193
X16001	Potassium channel RCK3	0.047	0.025	M60525	Nerve growth factor-inducible protein	0.003	0.019
X16002	Potassium channel RCK4	0.044	0.018	U88958	Neuritin	1.169	1.320
AF089730	Potassium channel subunit (Slack)	0.093	0.120	M34643	Neurotrophin 3	0.010	0.010
AF022819	Potassium channel TWIK	0.346	0.417	D45201	Neurofibromin	0.034	0.011
M59980	Voltage gated potassium channel (RK5)	0.041	0.041	L06894	Platelet-derived growth factor A-chain	0.970	0.784
X12589	Voltage dependent potassium channel	0.173	0.163	X55183	Schwannoma-derived growth factor	0.021	0.034
M22253	Sodium channel I	0.013	0.011	J04979	Stathmin	0.430	0.630
X03639	Sodium channel II	0.041	0.049	AF306458	Superiorcervical ganglion 10	2.422	5.521
Y00766	Sodium channel III	0.044	0.171	AY004290	Superiorcervical ganglion 10-like protein	1.250	1.870
M91808	Sodium channel beta 1 subunit	0.164	0.272	BG664300	TMEFF2	1.765	3.061
U37026	Sodium channel beta 2 subunit (SCNB2)	0.132	0.444	NM_012671	Transforming growth factor, alpha subunit	0.052	0.065

d, day; DRG, dorsal root ganglion; nVol, normalized volume.