

S1 Known anthelmintic targets

Chemical class	Drug	Target	C. elegans	WormBase ID	S. lupi	T. canis	A. caninum	D. immitis
Benzimidazole	Albendazole Flubendazole Mebendazole	β -Tubulin	BEN-1	WBGene00000248	SLUP08646	Tcan_03365, Tcan_06249, Tcan_06255, Tcan_09801, Tcan_13288, Tcan_14330	ANCCAN_08153, ANCCAN_23405	nDi.2.2.2.g05013, nDi.2.2.2.t08102
Imidazothiazole	Levamisole	nACh receptor	LEV-1	WBGene00002974	No Ortholog	No Ortholog	ANCCAN_04244, ANCCAN_04245	No Ortholog
			LEV-8	WBGene00002975	SLUP00834	Tcan_11273	ANCCAN_13800	No Ortholog
			UNC-29	WBGene00006765	SLUP00665	Tcan_11469	ANCCAN_01710, ANCCAN_01709, ANCCAN_01708, ANCCAN_01707	nDi.2.2.2.t01615
			UNC-38	WBGene00006774	SLUP03985	Tcan_11144	ANCCAN_01611, ANCCAN_01612	nDi.2.2.2.t02370, nDi.2.2.2.g10954, nDi.2.2.2.g11076
			UNC-63	WBGene00006797	SLUP03902	Tcan_16841	ANCCAN_03171, ANCCAN_03172	nDi.2.2.2.t06903, nDi.2.2.2.g09065, nDi.2.2.2.g12253
Macrocyclic lactone	Ivermectin Milbemycin Moxidectin Selamectin	Glutamate receptor	AVR-14	WBGene00000232	SLUP07838	No Ortholog	ANCCAN_15705	No Ortholog
			AVR-15	WBGene00000233	No Ortholog	No Ortholog	ANCCAN_00875	No Ortholog
			GLC-1	WBGene00001591	No Ortholog	No Ortholog	No Ortholog	No Ortholog
			GLC-2	WBGene00001592	SLUP08305	Tcan_16332	ANCCAN_01646	nDi.2.2.2.t02696
		GLC-3	WBGene00001593	SLUP02369	Tcan_16956	ANCCAN_01794	No Ortholog	
		GLC-4	WBGene00001594	SLUP03251	Tcan_14831	ANCCAN_13734	nDi.2.2.2.t00192	
		GABA receptor	EXP-1	WBGene00001373	SLUP02562	Tcan_17281	ANCCAN_18275, ANCCAN_18274	nDi.2.2.2.t07888, nDi.2.2.2.g11489

			GAB-1	WBGene00001512	SLUP05738	Tcan_07086	ANCCAN_20698, ANCCAN_20699, ANCCAN_26728	nDi.2.2.2.g10534
			UNC-49	WBGene00006784	SLUP04616	Tcan_16385	ANCCAN_13850, ANCCAN_14230	nDi.2.2.2.g09834
Cyclodepsipeptide	Emodepside	Voltage gated K ⁺ channel	SLO-1	WBGene00004830	SLUP05327	Tcan_18743	ANCCAN_14118, ANCCAN_28821	nDi.2.2.2.t08451
		Latrophilin	LAT-1	WBGene00002251	SLUP07840	No Ortholog	ANCCAN_07087, ANCCAN_28946	nDi.2.2.2.t07842
			LAT-2	WBGene00002252	SLUP06213	Tcan_16081	ANCCAN_12169, ANCCAN_19375, ANCCAN_26551	nDi.2.2.2.t00214
Aminoacetonitrile derivative	Monepantel	nACh receptor	ACR-20					
			ACR-23	WBGene00000062	No Ortholog	No Ortholog	No Ortholog	No Ortholog
			DES-2	WBGene00000955	SLUP01032	Tcan_00444, Tcan_09839	ANCCAN_14039, ANCCAN_21843	No Ortholog