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**Supporting information for article:**

### **The structure of a DR4-TRAIL complex**

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**Table S1** Identification of modules in DR4 following the classification of Sprang & Naismith (1998).

A1 modules have one disulfide bond, a length of 12-17 residues, and a pattern of Cys1-Xaa<sub>2</sub>-Gly-Xaa-Tyr/Phe-Xaa-Xaa<sub>4-9</sub>-Cys2, where Xaa represents any amino acid and the subscript the number.

B2 modules have two disulfide bonds between Cys1 and Cys3 and Cys2 and Cys4, a length of 21-24 residues, and a pattern of Cys1-Xaa<sub>2</sub>-Cys2-Xaa<sub>3-6</sub>-Xaa<sub>5</sub>-Cys3-Thr-Xaa<sub>2-5</sub>-Asn-Thr-Val-Cys4.

Module	Cys1	Cys2	Cys3	Cys4	Residues
A1	C132	C145			14
A1	C148	C164			17
B2	C167	C170	C180	C188	22
A1	C190	C204			15
B2	C207	C211	C221	C229	23

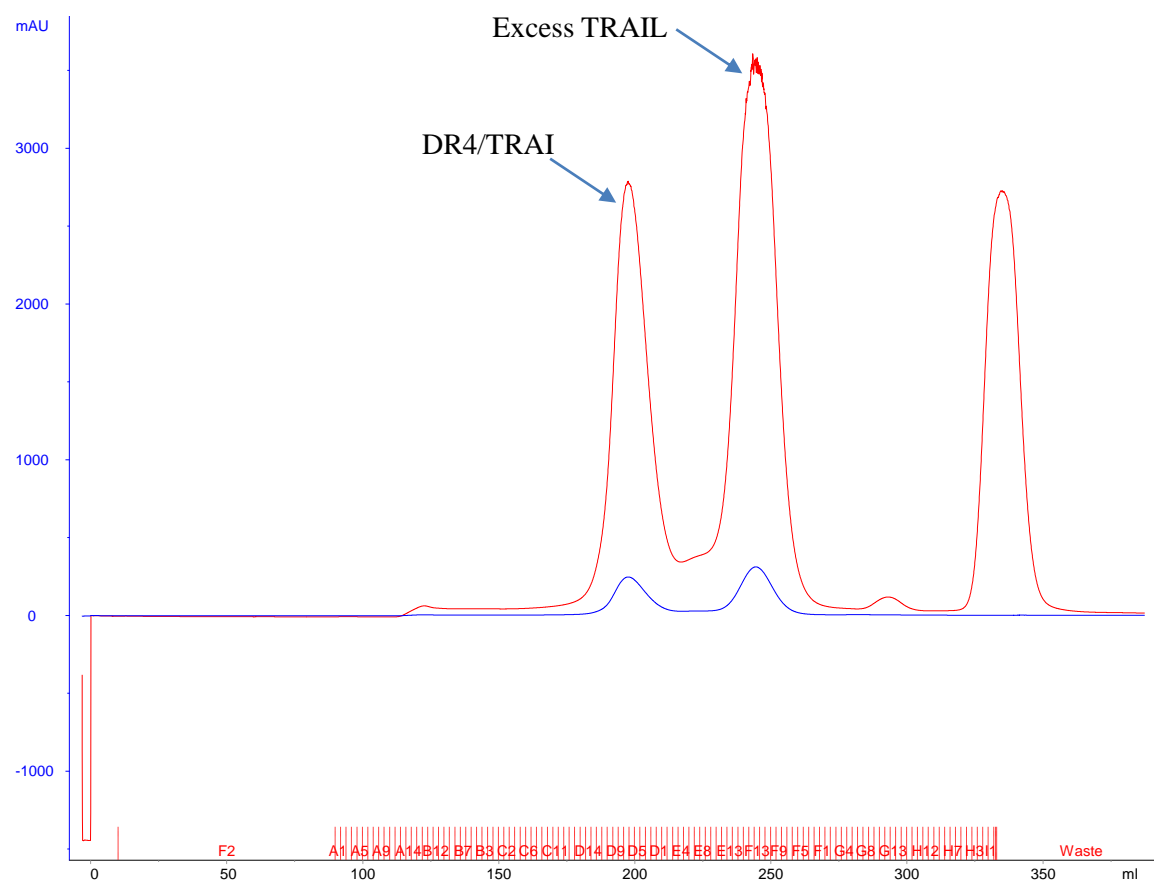
**Table S2** Interactions by DR4 -buried surface area, number of residues, number of atoms, number of hydrogen bonds, number of salt links, and van der Waals contacts (average of three interactions).

	Area, Å <sup>2</sup>	# Res.	# Atoms	# H-bonds	# Salt links	# VDW contacts
131	5±5					
152-173	540±10	14±2	35±4	4±1	5±2	66±3
191	5±5					
194-213	505±50	10±3	42±5	6±1	6±1	80±7
<b>Total</b>	1065±45	24±4	77±9	10±1	10±2	145±9

**Table S3** Interactions by TRAIL -buried surface area, number of residues, number of atoms, number of hydrogen bonds, number of salt links, and van der Waals contacts (average of three interactions).

	Area, Å <sup>2</sup>	# Res.	# Atoms	# H-bonds	# Salt links	# VDW contacts
147-149	55±5	1	1			1
179	5±5					
198-205	170±35	4±1	10±3	3±1	3±1	28±4
207,209,212	45±5	2	2			2
214-220	195±5	5	14±1	2±1		22±2
224-226	30±5	2	4±1		2	5±2
249-251	25±20	1±1	1±1			3±2
260-264	85±5	2	7±1	1		10±2
<b>Right monomer</b>	605±45	17±2	39±5	7±0	5±1	70±9
130	15±15	1±1	2±2			2±2
155-161	130±5	3±1	11±1			15±3
189-195	160±5	4	13±1	3±1	3	32±3
235-239	105±5	3	12±2			18±5
267-271	70±5	3	7±1		2±2	9±1
<b>Left monomer</b>	480±10	13±1	45±4	3±1	5±2	75±9
<b>Total</b>	1085±35	30±2	84±5	10±1	10±2	145±9

**Figure S1** The chromatogram obtained from the preparation and purification of DR4/TRAIL complex (red = 220 nm; blue = 280 nm)



**Figure S2** Gel analysis of the fractions containing the DR4/TRAIL complex.

