Supplement S2

Human protein extract mixed with silica nanoparticles

Statistics about the *RNA Recognition Motif* (RRM) domain, identified by the InterPro domain **IPR000504**.

This domain can be found in 1089 proteins of the human theoritical proteome (0.72%). The table below provides the number of proteins with at least one RRM motif identified, using a nano-LC MS/MS shotgun analysis, in a human protein extract mixed with silica nanoparticles (Mathé & al. 2003). Percentage of "RRM proteins" are given comparatively to the total RRMs identified.

Table 1: Human proteins with RRM motif(s)

	Count	%
HA: proteins High Affinity proteins for SiO2 NPs	50	43.1
NA: proteins with No Affinitiy for SiO2 NPs	1	0.9
unassigned proteins (detected but neither in NA or HA)	65	56.0
Whole nano-LC MS/MS Shotgun	116	100.0

For each subsets one can found the list of proteins having at least one RRM motif in the following tables. Each table contain the uniprot ID in the first column, the shotgun spectral counts (SC) in extracts mixed with SiO2 NPs (second column) or not (third column). The last two columns contain weblinks to uniprot protein entries and interpro domain lists.

High Affinity (HA) set

	SC SiO2	SC WT	Protein	Domains
P52272	110.5	26.2	uniprot-link	interpro-link
P11940	125.5	37.8	uniprot-link	interpro-link
Q15233	67.8	12.0	uniprot-link	interpro-link
P33240	42.2	2.0	uniprot-link	interpro-link
Q13283	48.0	6.2	uniprot-link	interpro-link
P14866	41.0	4.5	uniprot-link	interpro-link
P55884	102.5	36.2	uniprot-link	interpro-link
Q14498	27.8	1.0	uniprot-link	interpro-link
Q9NTZ6	44.2	7.8	uniprot-link	interpro-link
P18615	16.0	0.0	uniprot-link	interpro-link
P08621	15.5	0.0	uniprot-link	interpro-link
Q5T8P6	15.5	0.0	uniprot-link	interpro-link
P26368	32.5	5.0	uniprot-link	interpro-link
Q13310	30.2	4.5	uniprot-link	interpro-link
P49756	25.0	2.8	uniprot-link	interpro-link
Q07955	14.0	0.0	uniprot-link	interpro-link
O75821	27.0	4.0	uniprot-link	interpro-link
Q15056	28.0	4.5	uniprot-link	interpro-link
O15056	12.8	0.0	uniprot-link	interpro-link
Q8WXF1	21.0	2.0	uniprot-link	interpro-link
A0AV96	19.0	1.5	uniprot-link	interpro-link
Q9UHX1	35.0	8.0	uniprot-link	interpro-link
O15042	11.8	0.0	uniprot-link	interpro-link
Q9P2N5	11.5	0.0	uniprot-link	interpro-link
P43243	41.2	13.2	uniprot-link	interpro-link

	SC SiO2	SC WT	Protein	Domains
P35637	21.2	3.0	uniprot-link	interpro-link
Q9UN86	14.0	0.8	uniprot-link	interpro-link
Q8IY67	24.0	3.5	uniprot-link	interpro-link
O43719	24.2	4.8	uniprot-link	interpro-link
Q86V81	12.5	0.5	uniprot-link	interpro-link
Q96PK6	20.8	3.5	uniprot-link	interpro-link
P51991	16.8	2.0	uniprot-link	interpro-link
Q01081	9.0	0.0	uniprot-link	interpro-link
Q96I25	8.8	0.0	uniprot-link	interpro-link
O60506	71.5	14.5	uniprot-link	interpro-link
P23588	41.2	16.8	uniprot-link	interpro-link
Q8N684	14.2	2.0	uniprot-link	interpro-link
Q13151	9.2	0.5	uniprot-link	interpro-link
Q9UKV3	12.2	1.8	uniprot-link	interpro-link
Q05519	10.5	1.2	uniprot-link	interpro-link
P31943	42.2	19.5	uniprot-link	interpro-link
Q9BTD8	11.2	2.0	uniprot-link	interpro-link
P38159	8.8	1.0	uniprot-link	interpro-link
Q13247	9.0	1.2	uniprot-link	interpro-link
O43390	39.2	17.8	uniprot-link	interpro-link
Q01130	8.2	1.8	uniprot-link	interpro-link
P08579	10.2	3.0	uniprot-link	interpro-link
Q16630	10.0	2.8	uniprot-link	interpro-link
Q13148	8.0	2.2	uniprot-link	interpro-link
Q01844	10.2	4.2	uniprot-link	interpro-link

No Affinity (NA) set

	SC SiO2	SC WT	Protein	Domains
P05455	6.2	32	uniprot-link	interpro-link

Unassigned set

	SC SiO2	SC WT	Protein	Domains
Q9UPN6	7.2	0.0	uniprot-link	interpro-link
P19338	137.8	94.5	uniprot-link	interpro-link
Q9Y3B4	6.2	0.0	uniprot-link	interpro-link
Q92615	5.0	0.0	uniprot-link	interpro-link
Q9BY77	5.0	0.2	uniprot-link	interpro-link
Q8WXA9	3.8	0.0	uniprot-link	interpro-link
Q15287	3.8	0.0	uniprot-link	interpro-link
O00425	4.8	0.2	uniprot-link	interpro-link
Q96EP5	3.5	0.0	uniprot-link	interpro-link
P84103	6.8	1.0	uniprot-link	interpro-link
P31942	3.2	0.0	uniprot-link	interpro-link
Q9NWH9	3.2	0.0	uniprot-link	interpro-link
Q9H0L4	4.2	0.2	uniprot-link	interpro-link
Q8WUA2	3.0	0.0	uniprot-link	interpro-link
Q16629	5.0	0.5	uniprot-link	interpro-link
P09012	5.0	0.5	uniprot-link	interpro-link

	SC SiO2	SC WT	Protein	Domains
Q13243	6.8	1.2	uniprot-link	interpro-link
P55795	6.0	1.0	uniprot-link	interpro-link
O14979	3.8	0.2	uniprot-link	interpro-link
Q14966	4.5	0.5	uniprot-link	interpro-link
Q14011	2.5	0.0	uniprot-link	interpro-link
P26599	36.2	22.2	uniprot-link	interpro-link
Q9BWF3	2.2	0.0	uniprot-link	interpro-link
Q71RC2	2.2	0.0	uniprot-link	interpro-link
Q86U42	2.2	0.0	uniprot-link	interpro-link
P98175	3.2	0.2	uniprot-link	interpro-link
Q9NWB1	2.0	0.0	uniprot-link	interpro-link
O95104	1.8	0.0	uniprot-link	interpro-link
P62995	1.8	0.0	uniprot-link	interpro-link
Q92804	1.5	0.0	uniprot-link	interpro-link
Q93062	3.0	0.5	uniprot-link	interpro-link
Q9HCJ3	1.2	0.0	uniprot-link	interpro-link
Q96T37	1.2	0.0	uniprot-link	interpro-link
Q9Y4F3	1.0	0.0	uniprot-link	interpro-link
P98179	1.0	0.0	uniprot-link	interpro-link
P52597	2.8	7.2	uniprot-link	interpro-link
Q9P2K5	1.8	0.2	uniprot-link	interpro-link
P09651	8.5	4.8	uniprot-link	interpro-link
O75494	0.8	0.0	uniprot-link	interpro-link
Q9NZI8	2.2	5.2	uniprot-link	interpro-link
Q9Y6M1	0.0	0.5	uniprot-link	interpro-link
P31483	0.0	0.5	uniprot-link	interpro-link
Q9NW64	0.5	0.0	uniprot-link	interpro-link
Q15717	0.5	0.0	uniprot-link	interpro-link
P23246	4.0	7.0	uniprot-link	interpro-link
Q8WVV9	2.5	1.2	uniprot-link	interpro-link
Q7Z5Q1	0.2	0.0	uniprot-link	interpro-link
O43426	0.2	0.0	uniprot-link	interpro-link
O15047	0.2	0.0	uniprot-link	interpro-link
Q17RY0	0.2	0.0	uniprot-link	interpro-link
Q96T58	0.2	0.0	uniprot-link	interpro-link
Q9BQ04	0.0	0.2	uniprot-link	interpro-link
Q92879	0.0	0.2	uniprot-link	interpro-link
Q86U06	0.0	0.2	uniprot-link	interpro-link
Q08170	0.8	0.2	uniprot-link	interpro-link
Q99729	3.5	5.2	uniprot-link	interpro-link
Q14103	13.5	11.8	uniprot-link	interpro-link
Q15427	2.0	1.2	uniprot-link	interpro-link
Q9NW13	0.8	1.2	uniprot-link	interpro-link
Q01085	0.5	0.2	uniprot-link	interpro-link
Q15020	10.0	9.5	uniprot-link	interpro-link
P22626	12.8	12.8	uniprot-link	interpro-link
Q4G0J3	0.8	0.8	uniprot-link	interpro-link
P07910	1.2	1.2	uniprot-link	interpro-link
Q15424	0.2	0.2	uniprot-link	interpro-link