

SUPPLEMENTARY TABLES

Supplementary Table 1. Significant changes of the mRNA levels of CBXs between gastric cancer and normal gastric tissues were analyzed by ONCOMINE.

Gene	Type	Fold change	P-value	References
CBX1	Gastric Adenocarcinoma	2.415	4.52E-06	[2]
	Diffuse Gastric Adenocarcinoma	1.516	2.83E-08	[1]
	Gastric Mixed Adenocarcinoma	1.66	2.25E-06	[1]
	Gastric Intestinal Type Adenocarcinoma	1.613	2.38E-13	[1]
	Gastric Intestinal Type Adenocarcinoma	2.116	2.21E-13	[3]
CBX2	Diffuse Gastric Adenocarcinoma	2.29	6.01E-09	[2]
	Gastric Mixed Adenocarcinoma	2.077	3.75E-04	[2]
	Gastric Intestinal Type Adenocarcinoma	4.485	1.70E-09	[3]
CBX3	Gastric Intestinal Type Adenocarcinoma	3.014	6.64E-14	[3]
CBX4	Gastric Intestinal Type Adenocarcinoma	1.783	2.55E-17	[1]
	Gastric Mixed Adenocarcinoma	1.955	3.03E-06	[1]
	Diffuse Gastric Adenocarcinoma	1.73	4.23E-04	[1]
	Diffuse Gastric Adenocarcinoma	2.466	2.45E-05	[3]
	Gastric Mixed Adenocarcinoma	3.314	2.29E-06	[3]
	Gastric Mixed Adenocarcinoma	1.625	7.18E-04	[2]
CBX6	Diffuse Gastric Adenocarcinoma	1.758	8.38E-05	[1]
CBX7	Diffuse Gastric Adenocarcinoma	-1.656	9.09E-05	[2]

Abbreviation: CBXs: Chromobox proteins.

REFERENCES

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Supplementary Table 2. Drug targets of CBXs in gastric cancer (Enrichr).

Term	Overlap	P-value	Odds ratio	Combined score	Genes
Prednisolone-184 mg/kg in Water-Rat-Heart-5d-up	3/257	0.005418	8.337966	43.50722	CBX6
Phenacetin-619 mg/kg in Corn Oil-Rat-Kidney-5d-up	3/260	0.005595	8.241758	42.74019	CBX6
Pramoxine-526 mg/kg in Corn Oil-Rat-Heart-1d-up	3/261	0.005655	8.210181	42.48917	CBX6
44'-Methylenedianiline-81 mg/kg in Corn Oil-Rat-Kidney-5d-up	3/261	0.005655	8.210181	42.48917	CBX6
Bromisovalum-250 mg/kg in Corn Oil-Rat-Kidney-5d-up	3/267	0.006022	8.025682	41.02991	CBX6
6-Mercaptopurine-25 mg/kg in Corn Oil-Rat-Kidney-5d-up	3/269	0.006147	7.966012	40.56069	CBX6
Bromisovalum-250 mg/kg in Corn Oil-Rat-Kidney-1d-up	3/272	0.006338	7.878151	39.87225	CBX6
2-Acetylaminofluorene-30 mg/kg in CMC-Rat-Kidney-3d-up	3/273	0.006403	7.849294	39.64677	CBX6
123-Trichloropropane-108 mg/kg in CMC-Rat-Kidney-1d-up	3/274	0.006468	7.820647	39.42326	CBX6
Ascorbic Acid-2000 mg/kg in Water-Rat-Kidney-1d-up	3/279	0.006798	7.680492	38.33433	CBX6

Abbreviation: CBXs: Chromobox proteins.

Supplementary Table 3. microRNA targets of CBXs in gastric cancer (Enrichr).

Term	Overlap	P-value	Odds ratio	Combined score	Genes
mmu-miR-493	10/1997	2.33E-04	3.576794	29.91359	CBX2/5
hsa-miR-1296	8/1377	4.43E-04	4.149808	32.04482	CBX2/5/6
mmu-miR-5128	7/1108	6.66E-04	4.512635	33.00666	CBX1/2/4/7
hsa-miR-2277-3p	9/1993	0.001132	3.225575	21.88069	CBX3/4/7
mmu-miR-293	4/382	0.001866	7.479432	47.00003	CBX6/7
mmu-miR-2183	7/1335	0.001985	3.745318	23.30452	CBX3/5/6
mmu-miR-3099	7/1572	0.004978	3.180662	16.86609	CBX6/7
hsa-miR-4730	4/516	0.005485	5.537099	28.82443	CBX2/4/5
hsa-miR-566	5/877	0.006797	4.072324	20.32605	CBX2/5/7
mmu-miR-1306-5p	7/1681	0.007174	2.97442	14.68542	CBX7

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Supplementary Table 4. Transcriptional factor targets of CBXs in gastric cancer (Enrichr).

Term	Overlap	P-value	Odds ratio	Combined score	Genes
TEAD4 (human)	10/1354	8.31E-06	5.275375	61.71111	CBX2/6/7/8
NRF1 (human)	9/1356	6.26E-05	4.740834	45.88685	CBX1/2/5/7
HINFP (human)	13/3047	9.07E-05	3.047494	28.36607	CBX2/3/7
WT1 (human)	12/2689	1.28E-04	3.18759	28.58052	CBX2/3/6/7/8
E2F1 (human)	15/4207	1.52E-04	2.546776	22.39494	CBX1/2/3/4/5/6/7/8
EGR1 (mouse)	8/1617	0.001284	3.533881	23.52762	CBX2/3/7
SP3 (human)	7/1332	0.001959	3.753754	23.40551	CBX2/4/7/8
PCBP1 (human)	7/1360	0.002207	3.676471	22.48527	CBX2/4/7/8
TCFAP2A (human)	7/1367	0.002273	3.657644	22.26283	CBX2/4/8

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