

Hypoxia activates Wnt/ β -catenin signaling by regulating the expression of BCL9 in human hepatocellular carcinoma

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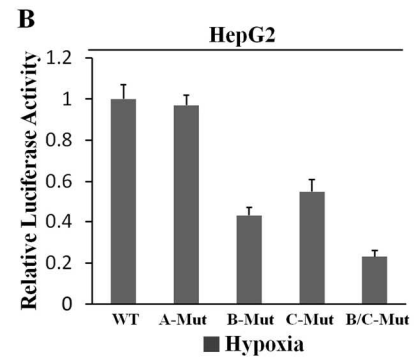
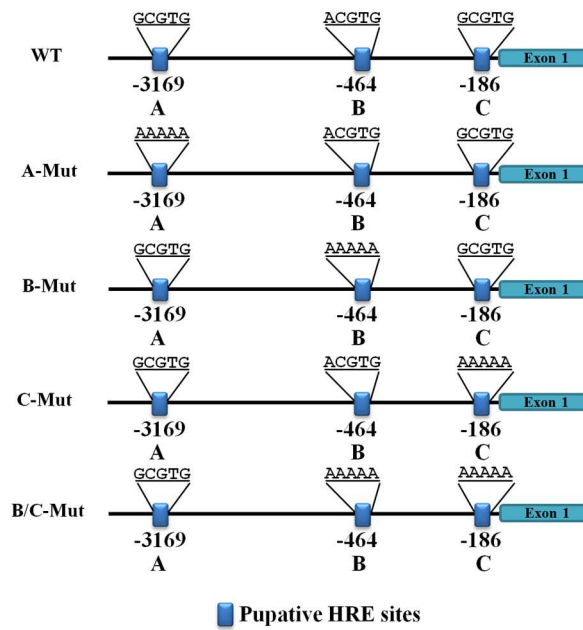
Disclosures:

Conflicts of interest: The authors disclose no conflicts.

Supplementary table 1. Correlation of BCL9 expression and clinicopathological parameters in hepatocellular carcinoma patients (N = 360)

Variable	n	BCL9 expression			P-value
		-	+	++	
Age					
≤ 55	260	162	72	26	0.09
> 55	100	74	21	5	
Gender					
Male	298	192	83	23	0.10
Female	62	44	10	8	
Tumor size (cm)					
≤ 5.0	133	89	33	11	0.92
> 5.0	227	147	60	20	
Edmondson invasion					
I	242	162	64	16	0.00
II	37	8	14	15	
III					
Microvascular invasion					
(-)	31	28	3	0	0.01
(+)	329	208	90	31	
T-Stage					
1	32	28	4	0	0.02
2	195	119	56	20	
3	105	74	21	10	
4	28	15	12	1	
Lymphnode metastasis					
(-)	332	218	83	31	0.15
(+)	28	18	10	0	
Metastasis					
(-)	357	235	91	31	0.26
(+)	3	1	2	0	

A HRE sites: A/GCGTG



Supplementary Figure 1. Mutating the HRE site confirmed that hypoxia interacted with HRE-B and HRE-C in the BCL9 promoter to induced its expression. (A) The HRE-A mutant (A-Mut), HRE-B mutant (B-Mut), HRE-C mutant (C-Mut) as well as HRE-B/C mutant (B/C-Mut) were constructed, respectively. **(B)** The luciferase activities were significantly suppressed in B-Mut, C-Mut and B/C-Mut groups after treatment of hypoxia.