

Sequence Conservation of Homeodomain Binding Motifs in Mitf Promoters

Consensus sequence for Chx10 binding site are 5'TAATtPuPu3' (labeled S) or 5'ATTAApPyPy3' (labeled AS) (Dorval et al., J Biol Chem. 281, 744-751, 2006)

A-Promoter

	Hx-1 (S)	Hx-2 (AS)	Hx-3 (S)	Hx-4 (AS)	Hx-5 (S)	Hx-6 (AS)
Mm -	TAATACA	ATTAAC T	TAATTGG	ATTATAA	TAATAGA	ATTAATA
Rn -	...T.AT	T	..A....	TAA	GA..A.A	A..A..A
HS -	...A.TT	C	..C....	CAG	TG..A.G	A..C..A
Pt -	...A.TT	C	..C....	CAG	TG..A.G	G..C..A

H-Promoter

	Hx-1 (AS)
Mm -	ATTAAAGC
Rn -	G.
HS -	A.
Pt -	A.

D-Promoter

	Hx-1 (S)	Hx-2 (AS)	Hx-3 (S)	Hx-4 (S)	Hx-5 (AS)
Mm -	TAATTGA	ATTAATC	TAATCAG	TAATTAC	ATTAGCT
Rn -	...T...	ATC	CA.	AT	G..
HS -	...C...	TGT	CT.	GC	A..
Pt -	...C...	TGT	CT.	GC	A..

	Hx-6 (S)	Hx-7 (S)	Hx-8 (S)	Hx-9 (S)	Hx-10 (AS)
Mm -	TAACTAG	TAATTTG	TAATTGA	TAATTAG	ATTATGC
Rn -	...C...	TG			GT.
HS -	...C...	TA			TT.
Pt -	...C...	TA			TT.