

**Figure S1:** Sequence of the human antigen used to raise the antibody anti-CHST10 (Sigma–Aldrich, cat# HPA012884, Prestige Antibodies).

Recombinant Protein Epitope Signature Tag (PrEST) antigen sequence:

PEVRKLP EEKH IPEELKPTGKELPDSQLVQPLVYMERLELIRNVCRDDAL  
 KNLSHTPVSKFVLDRI FVCDKHKILFCQTPKVGNTQWKKVLIVLNGAFSS  
 IEEIPENVVHDHEKNGLPRLSSFSDAEIQKRL

**Figure S2a:** Sequence identity between antigen sequence for human CHST10 with rat CHST10 isoform X1.

**Carbohydrate sulfotransferase 10 isoform X1 [Rattus norvegicus]**

NCBI Reference Sequence: XP\_006244792.1

**Sequence ID: Query\_465195 Length: 374 Number of Matches: 1**

Range 1: 66 to 197 [Graphics](#)

**Alignment statistics for match #1**

Score	Expect	Method	Identities	Positives	Gaps
216 bits(549)	3e-75	Compositional matrix adjust.	107/132(81%)	114/132(86%)	0/132(0%)
Query 1	PEVRKLP EEKH IPEELKPTGKELPDSQLVQPLVYMERLELIRNVCRDDALKNLSHTPVSK	60			
	PE KL EKH E +KPTGK L +S QP VY+ERLELIRN C+++AL+NLSHT VSK				
Sbjct 66	PEAEKLRGEKHFSEVMKPTGKMLSESHPDQPPVYLERLELIRNACKEEALRNLSHTEVSK	125			
Query 61	FVLDRI FVCDKHKILFCQTPKVGNTQWKKVLIVLNGAFSSIEEIPENVVHDHEKNGLPRL	120			
	FVLDRI FVCDKHKILFCQTPKVGNTQWKKVLIVLNGAFSSIEEIPENVVHDHEKNGLPRL				
Sbjct 126	FVLDRI FVCDKHKILFCQTPKVGNTQWKKVLIVLNGAFSSIEEIPENVVHDHEKNGLPRL	185			
Query 121	SSFSDAEIQKRL 132				
	SSFS IQKRL				
Sbjct 186	SSFSKIGIQKRL 197				

**Figure S2b:** Sequence identity between antigen sequence for human CHST10 with rat CHST10 isoform X2.

**Carbohydrate sulfotransferase 10 isoform X2 [Rattus norvegicus]**

NCBI Reference Sequence: XP\_017451740.1

**Sequence ID: Query\_7009531** Length: 356 Number of Matches: 1

Range 1: 48 to 179 [Graphics](#)

**Alignment statistics for match #1**

Score	Expect	Method	Identities	Positives	Gaps
216 bits(549)	2e-75	Compositional matrix adjust.	107/132(81%)	114/132(86%)	0/132(0%)
Query 1	PEVRKLPPEEKHIPEELKPTGKELPDSQLVQPLVYMERLELIRNVCRDDALKNLSHTPVSK				60
	PE KL EKH E +KPTGK L +S QP VY+ERLELIRN C+++AL+NLSHT VSK				
Sbjct 48	PEAEKLRGEKHFSEVMKPTGKMLSESHPDQPPVYLERLELIRNACKKEEALRNLSHTEVSK				107
Query 61	FVLDRI FVCDKHKILFCQTPKVGNTQWKKVLIVLNGAFSSIEEIPENVVHDHEKNGLPRL				120
	FVLDRI FVCDKHKILFCQTPKVGNTQWKKVLIVLNGAFSSIEEIPENVVHDHEKNGLPRL				
Sbjct 108	FVLDRI FVCDKHKILFCQTPKVGNTQWKKVLIVLNGAFSSIEEIPENVVHDHEKNGLPRL				167
Query 121	SSFSDAEIQKRL				132
	SSFS IQKRL				
Sbjct 168	SSFSKIGIQKRL				179

**Figure S2c:** Sequence identity between antigen sequence for human CHST10 with rat CHST10 isoform X3.

**Carbohydrate sulfotransferase 10 isoform X3 [Rattus norvegicus]**

NCBI Reference Sequence: XP\_038938897.1

**Sequence ID: Query\_91391** Length: 288 Number of Matches: 1

Range 1: 2 to 111 [Graphics](#)

**Alignment statistics for match #1**

Score	Expect	Method	Identities	Positives	Gaps
191 bits(486)	7e-67	Compositional matrix adjust.	94/110(85%)	100/110(90%)	0/110(0%)
Query 23	LPDSQLVQPLVYMERLELIRNVCRDDALKNLSHTPVSKFVLDRI FVCDKHKILFCQTPKV				82
	L +S QP VY+ERLELIRN C+++AL+NLSHT VSKFVLDRI FVCDKHKILFCQTPKV				
Sbjct 2	LSESHPDQPPVYLERLELIRNACKEEALRNLSHTEVSKFVLDRI FVCDKHKILFCQTPKV				61
Query 83	GNTQWKKVLIVLNGAFSSIEEIPENVVHDHEKNGLPRLSSFS DAEIQKRL			132	
	GNTQWKKVLIVLNGAFSSIEEIPENVVHDHEKNGLPRLSSFS IQKRL				
Sbjct 62	GNTQWKKVLIVLNGAFSSIEEIPENVVHDHEKNGLPRLSSFSKIGIQKRL			111	