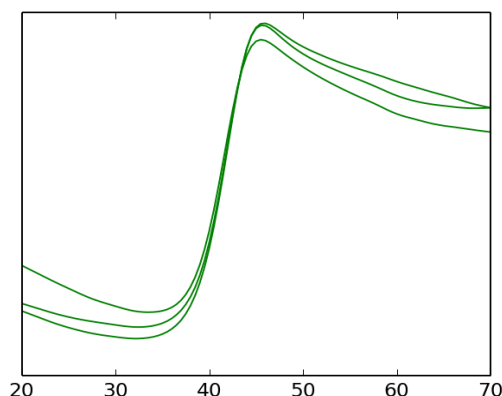


# MELTDOWN Melt Curve Analysis

AS\_30194\_buffer\_screen\_9\_081113 - Melt...



Full interpretation of the results requires you to look at the individual melt curves.

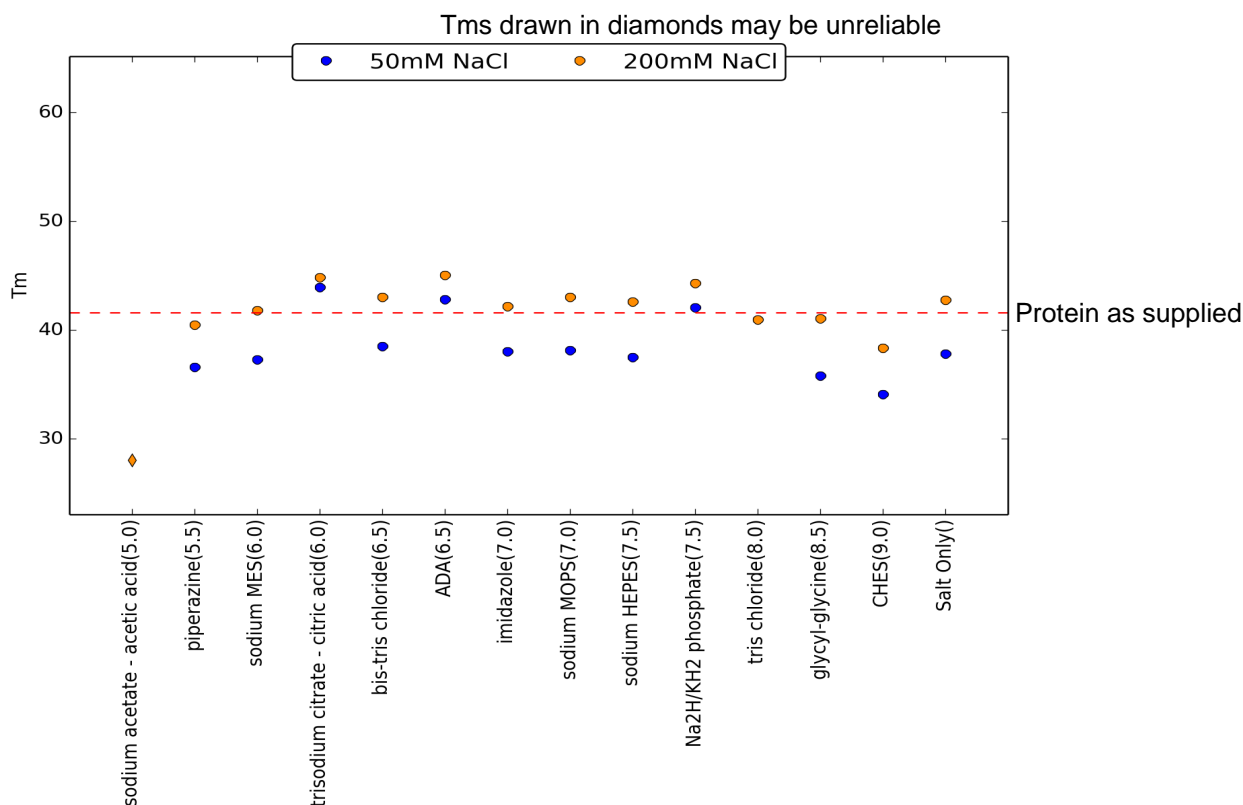
88% of curves were used in  $T_m$  estimations

Average estimation of error is **0.2 C**

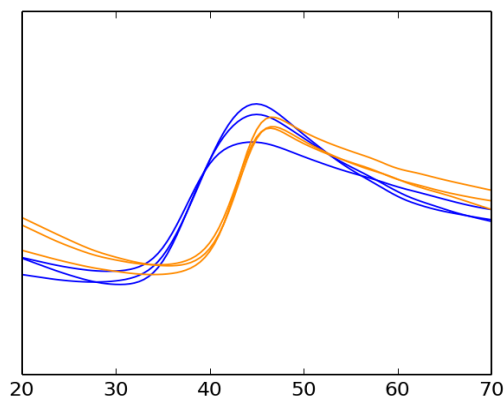
Protein as supplied is **well behaved**

Protein as supplied:  $T_m = 41.62(\pm 0.15)$

Lysozyme Control: Failed  
No Dye Control: Passed  
No Protein Control: Passed

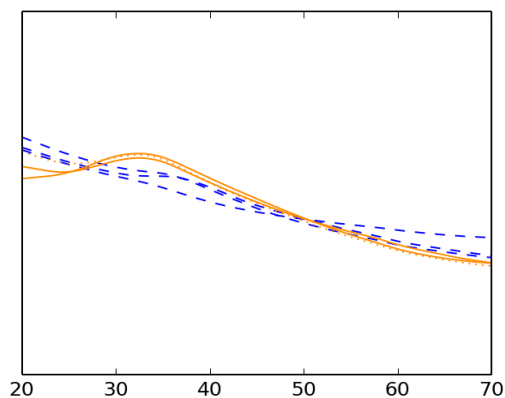


Highest  $T_m = 45.07 \pm 0.15$   
(ADA / 200mM NaCl)



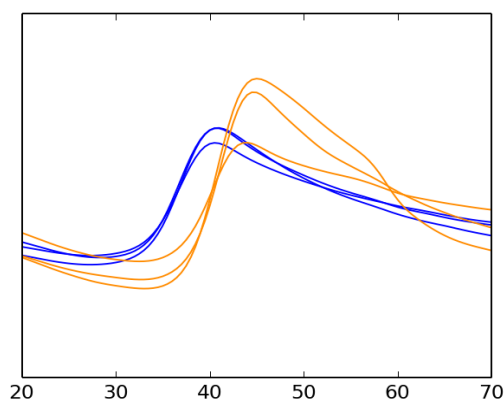
### Salt Only ( )

Grouped by	Tm
50mM NaCl	37.84 (+/-0.54)
200mM NaCl	42.78 (+/-0.06)



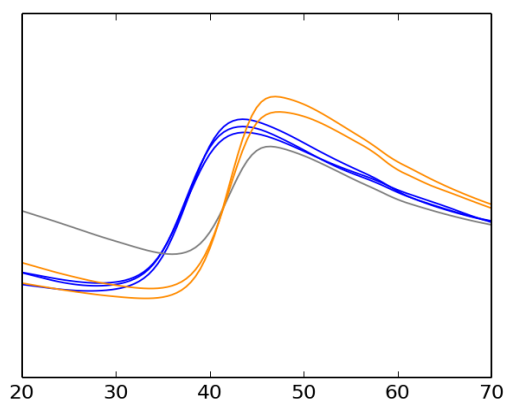
### sodium acetate - acetic acid (5.0)

Grouped by	Tm
50mM NaCl	None
200mM NaCl	28.05 (+/-0.67)^



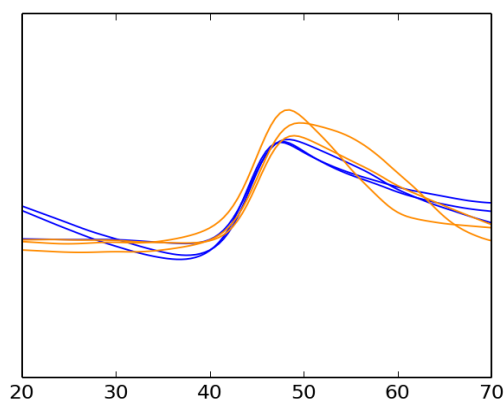
### piperazine (5.5)

Grouped by	Tm	Adjusted pH at Tm
50mM NaCl	36.61 (+/-0.08)	5.2
200mM NaCl	40.5 (+/-0.36)	5.13



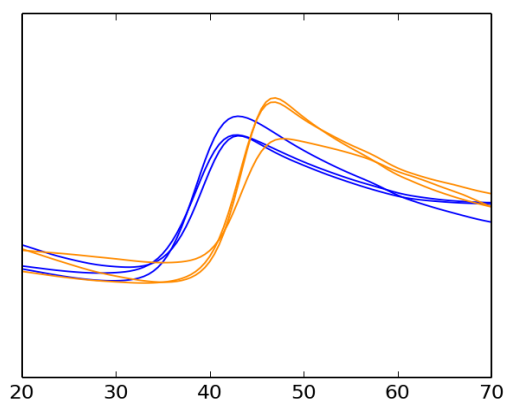
### sodium MES (6.0)

Grouped by	Tm	Adjusted pH at Tm
50mM NaCl	37.29 (+/-0.16)	5.87
200mM NaCl	41.83 (+/-0.01)	5.83



### trisodium citrate - citric acid (6.0)

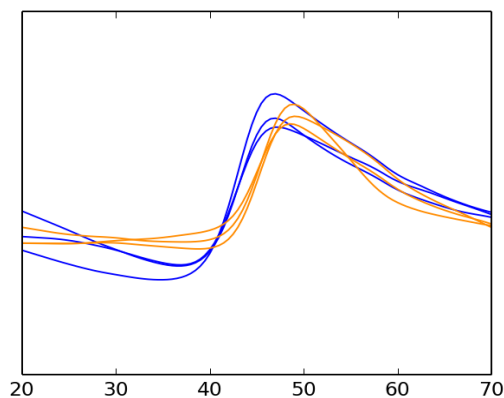
Grouped by	Tm	Adjusted pH at Tm
50mM NaCl	43.94 (+/-0.13)	6.09
200mM NaCl	44.85 (+/-0.11)	6.1



### bis-tris chloride (6.5)

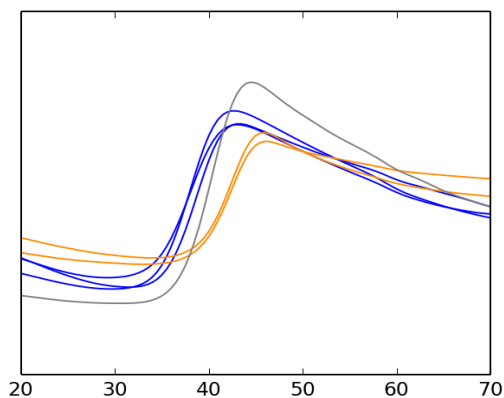
Grouped by	Tm	Adjusted pH at Tm
50mM NaCl	38.52 (+/-0.29)	6.26
200mM NaCl	43.07 (+/-0.07)	6.2

Curves drawn with dashed lines are monotonic and excluded from Tm calculations  
 Curves with complex melt transitions are marked (^) and are drawn with a dotted line  
 Curves coloured grey are outliers, and are excluded from Tm calculations



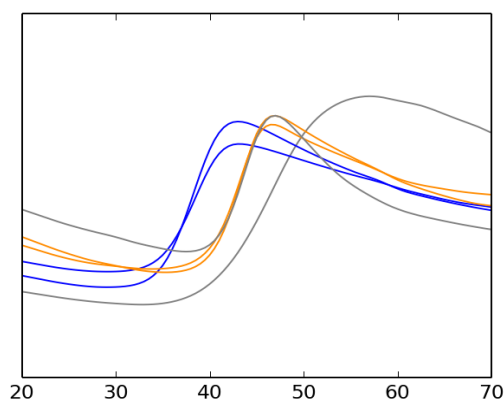
### ADA (6.5)

Grouped by	T <sub>m</sub>	Adjusted pH at T <sub>m</sub>
50mM NaCl	42.85 (+/-0.11)	6.42
200mM NaCl	45.07 (+/-0.15)	6.41



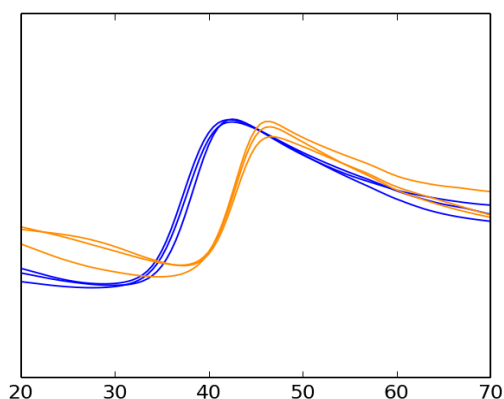
### imidazole (7.0)

Grouped by	T <sub>m</sub>	Adjusted pH at T <sub>m</sub>
50mM NaCl	38.04 (+/-0.32)	6.69
200mM NaCl	42.19 (+/-0.0)	6.62



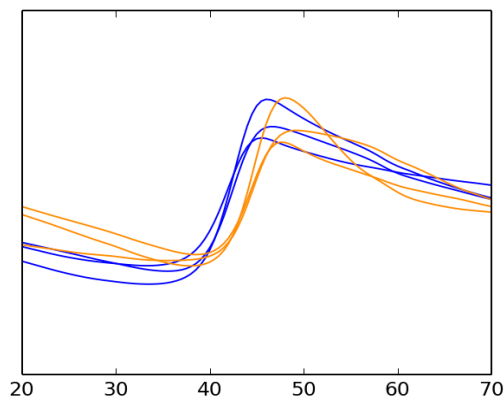
### sodium MOPS (7.0)

Grouped by	T <sub>m</sub>	Adjusted pH at T <sub>m</sub>
50mM NaCl	38.14 (+/-0.13)	6.85
200mM NaCl	43.05 (+/-0.07)	6.81



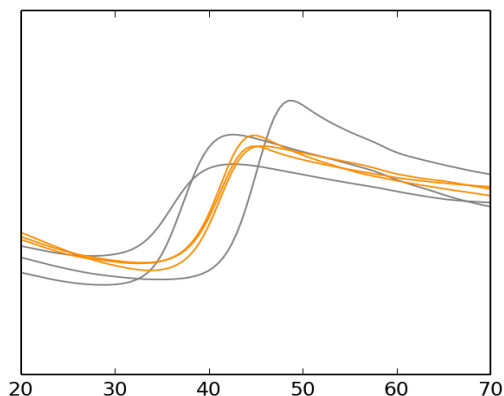
### sodium HEPES (7.5)

Grouped by	T <sub>m</sub>	Adjusted pH at T <sub>m</sub>
50mM NaCl	37.52 (+/-0.45)	7.39
200mM NaCl	42.61 (+/-0.02)	7.36



### Na<sub>2</sub>H/KH<sub>2</sub> phosphate (7.5)

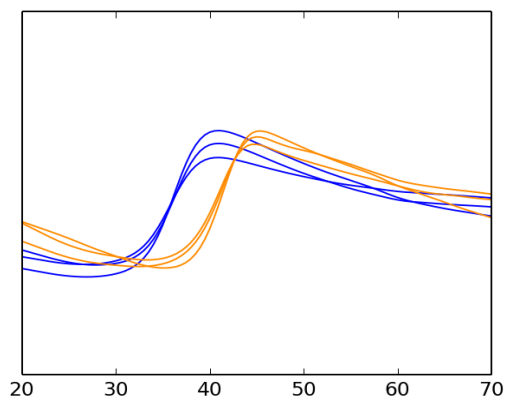
Grouped by	T <sub>m</sub>	Adjusted pH at T <sub>m</sub>
50mM NaCl	42.07 (+/-0.25)	7.62
200mM NaCl	44.33 (+/-0.12)	7.63



### tris chloride (8.0)

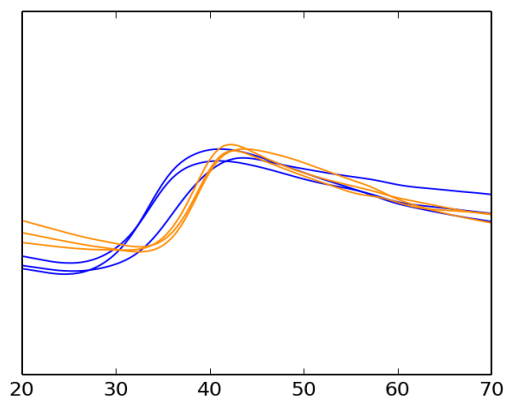
Grouped by	T <sub>m</sub>	Adjusted pH at T <sub>m</sub>
50mM NaCl	None	
200mM NaCl	40.99 (+/-0.03)	7.58

Curves drawn with dashed lines are monotonic and excluded from T<sub>m</sub> calculations  
 Curves with complex melt transitions are marked (^) and are drawn with a dotted line  
 Curves coloured grey are outliers, and are excluded from T<sub>m</sub> calculations



### glycyl-glycine (8.5)

Grouped by	Tm	Adjusted pH at Tm
50mM NaCl	35.81 (+/-0.19)	8.24
200mM NaCl	41.08 (+/-0.16)	8.15



### CHES (9.0)

Grouped by	Tm	Adjusted pH at Tm
50mM NaCl	34.14 (+/-1.09)	8.83
200mM NaCl	38.38 (+/-0.12)	8.78

Curves drawn with dashed lines are monotonic and excluded from Tm calculations  
 Curves with complex melt transitions are marked (^) and are drawn with a dotted line  
 Curves coloured grey are outliers, and are excluded from Tm calculations