

## $^1\text{H}$ , $^{13}\text{C}$ , and $^{15}\text{N}$ chemical shift assignments for the N-terminal extracellular domain of T-cadherin

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T-cadherin, also known as truncated/ H-/heart-cadherin, or Cadherin13 (= precursor version), is a glycoprotein that functions in  $\text{Ca}^{2+}$ -dependent homophilic cell adhesion. It is unique within the cadherin family since it lacks the usual cytoplasmic and membrane domains and instead attaches to the membrane via a glycosphosphoinositol (GPI) anchor. Moreover, a tryptophan conserved in all the other cadherins that plays a crucial role for their adhesive function is replaced by an isoleucine. In order to study the structure and adhesion properties of T-cadherin, the  $^1\text{H}$ ,  $^{15}\text{N}$ , and  $^{13}\text{C}$  chemical shift resonances of human T-cadherin first

extracellular domain (1-105 of the processed form) and 56 residues of the second extracellular domain (106-223) were assigned using multidimensional heteronuclear NMR experiments and two different constructs of human cadherin (1-105 = Tcad1 and 1-223 = Tcad12). For Tcad1 97% of the backbone and almost all of the side chain  $^1\text{H}$ ,  $^{15}\text{N}$  and  $^{13}\text{C}$  resonances could be assigned. The only side chain assignments missing are those for  $\text{H}_\zeta$  and  $\text{C}_\zeta$  of F17 and the side chain amides of N53 and N55. Chemical shift values for human T-cadherin (1-105) have been deposited in the BioMagResBank under accession number 7268.

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**Electronic supplementary material** Supplementary material is available in the online version of this article at <http://www.dx.doi.org/10.1007/s10858-006-9106-x> accessible for authorized users.

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