

Abstract

Claudin-5 is an important component of tight junction which is expressed in the brain of mouse and human and plays role in making blood brain barrier. T28B4.4 is a Claudin homolog and expressed in *C. elegans* nervous system. We wanted to see if mouse claudin-5 rescues function of T28B4.4 in *C. elegans*. We expressed Claudin-5 from mouse in *C.elegans* and performed Aldicarb assay. Our results show that it is not able to rescue the function of T28B4.4 in *C. elegans*. The t28b4.4 mutant worms show locomotory defects. We wanted to quantify and study the locomotory behaviour by Thrashing Assay and Body Bends. The Results show that there is a significant defect in the locomotory behaviour in t28b4.4 worms compared to wild type.