

Absence of *SH2B3* mutation in nonobese diabetic mice

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ABSTRACT. Type 1 diabetes is a chronic progressive autoimmune disease characterized by mononuclear cell infiltration, with subsequent destruction of insulin-producing β -cells. Studies have identified strong associations between type 1 diabetes and several chromosome regions, including 12q24. Association between type 1 diabetes and 12q24 arises from SNP rs3184504; rs3184504 is a nonsynonymous SNP in exon 3 of *SH2B3* (also known as *LNK*). Nonobese diabetic (NOD) mice recapitulate many aspects of the pathogenesis of type 1 diabetes in humans and are therefore frequently used in studies addressing the cellular and molecular mechanisms of this disease. It is of interest to know whether there is a similar mutation of *SH2B3* in NOD mice. We found that the *SH2B3* mutation is absent in NOD mice. To our knowledge, this is the first report of the sequence and the protein levels of SH2B3 in NOD mice.

Key words: Mutation; *SH2B3*; Single nucleotide polymorphism; NOD