

***SPINK1*                    c.195-66\_65insTTTT                    IVS3-66\_65insTTTT**

Variant is in linkage with variants c.56-37T>C, c.87+268A>G, c.101A>G (p.N34S), and c.195-606G>A

Citations:

Witt H, Luck W, Hennies HC, Classen M, Kage A, Lass U, Landt O, Becker M. (2000) **Mutations in the gene encoding the serine protease inhibitor, Kazal type 1 are associated with chronic pancreatitis.** *Nat Genet* 25, 213-216

18 affected (6 homozygous)

Variant was incorrectly reported as IVS3-69insTTTT

Chen JM, Mercier B, Audrezet MP, Raguene O, Quere I, Ferec C. (2001) **Mutations of the pancreatic secretory trypsin inhibitor (PSTI) gene in idiopathic chronic pancreatitis.** *Gastroenterology* 120, 1061-1064

17 (5 homozygous) affected, 3 unaffected

Rossi L, Pfützer RH, Parvin S, Ali L, Sattar S, Kahn AK, Gyr N, Whitcomb DC. (2001) **SPINK1/PSTI mutations are associated with tropical pancreatitis in Bangladesh. A preliminary report.** *Pancreatology* 1, 242-245

5 affected; all included in Schneider et al. (2002); not counted

Schneider A, Suman A, Rossi L, Barmada MM, Beglinger C, Parvin S, Sattar S, Ali L, Khan AK, Gyr N, Whitcomb DC. (2002) **SPINK1/PSTI mutations are associated with tropical pancreatitis and type II diabetes mellitus in Bangladesh.** *Gastroenterology* 123, 1026-1030

18 affected (1 homozygous), 1 unaffected; 5 affected overlaps with Rossi et al. (2001); all counted

Hirota M, Kuwata K, Ohmuraya M, Ogawa M. (2003) **From acute to chronic pancreatitis: the role of mutations in the pancreatic secretory trypsin inhibitor gene.** *JOP* 4, 83-88

9 affected; overlap with Kuwata et al. (2003); homozygotes not specified; not counted

Kuwata K, Hirota M, Nishimori I, Otsuki M, Ogawa M. (2003) **Mutational analysis of the pancreatic secretory trypsin inhibitor gene in familial and juvenile pancreatitis in Japan.** *J Gastroenterol* 38, 365-370

7 affected (2 homozygous; 1 also reported as a p.N34S homozygous in 2001); all counted

Keiles S, Kammesheidt A. (2006) **Identification of CFTR, PRSS1, and SPINK1 mutations in 381 patients with pancreatitis.** *Pancreas* 33, 221-227

20 affected

Chang YT, Wei SC, L PC, Tien YW, Jan IS, Su YN, Wong JM, Chang MC. (2009) **Association and differential role of PRSS1 and SPINK1 mutation in early-onset and late-onset idiopathic chronic pancreatitis in Chinese subjects.** *Gut* 58, 885

2 affected

Variant was reported in Table 1 as IVS-66-65insTTTT with no intron numbering

Oddly, linked variant p.N34S was not reported

Functional studies:

Masamune A, Kume K, Takagi Y, Kikuta K, Satoh K, Satoh A, Shimosegawa T. (2007) **N34S mutation in the *SPINK1* gene is not associated with alternative splicing.** *Pancreas* 34, 423-428

Kereszturi E, Király O, Sahin-Tóth M. (2009) **Minigene analysis of intronic variants in common *SPINK1* haplotypes associated with chronic pancreatitis.** *Gut* 58, 545-549. Epub 2008 Oct 31.

Boulling A, Chen JM, Callebaut I, Férec C. (2012) **Is the *SPINK1* p.Asn34Ser missense mutation per se the true culprit within its associated haplotype?** *WebmedCentral GENETICS* 2012; 3, WMC003084