

Supplementary Table 1 Characteristics of six control and six gluten-sensitive rhesus macaques used in this study

n	Animal Tag	Age ^a	Sex ^b	<i>M. mulatta</i> subspecies	<i>Mamu-DQA1</i> *	<i>Mamu-DQB1</i> *	Response to Dietary Gluten			
							AGA	TG2	Clinical	Enteritis, VA ^c
1	HI48	3.0	M	Indian	NA ^d	NA	-	-	-	-
2	HK31	3.5	M	Indian	NA	NA	-	-	-	-
3	JA99	2	M	Indian	NA	NA	-	-	-	-
4	JF24	2	F	Indian	NA	NA	-	-	-	-
5	CA18	12	F	Indian	NA	NA	-	-	-	-
6	JC16	2	F	Indian	NA	NA	-	-	-	-
7	HD13	1.5	M	Indian	<i>01:04</i>	<i>06:01</i>	+	+++	+	++
8	HB72	5	M	Indian	<i>01:04/23:01</i>	<i>06:01/18:02</i>	+	+	-	+/-
9	FB97	6	F	Indian	<i>01:02/23:02</i>	<i>06:05/18:04</i>	+++	+++	+++	+++
10	HA09	4.5	M	Indian	<i>01:05:01/26:02</i>	<i>06:02/18:11</i>	+	++	-	+
11	DE87	10	M	Indian	<i>01:05:01/05:04</i>	<i>06:02/17:03</i>	+	+++	-	+
12	FH45	7.0	F	Indian	<i>01:05:01/26:01</i>	<i>06:02/18:01</i>	+++	+	+++	+++

^aAge is expressed in years; ^bM = male, F = female; ^cvillous atrophy; ^dNA = Overall distribution of *Mamu II* (DQ) alleles in TG2 antibody-negative (control healthy) macaques is shown in Figure 1; Underlined alleles were found to be present in TG2 antibody-positive (gluten-sensitive) animals with significantly higher frequency ($p=0.008$) than in rest of the macaques.

Ethics statement: Approval for veterinary procedures in this study had been obtained from the Tulane University Animal Care and Use Committee, Animal Welfare Assurance A-4499-01. Animals in this project were under the full care of veterinarians with the standards incorporated in the Guide to the Care and Use of Laboratory Animals (NIH) 78-23 (Revised, 1996).