

Table 1 Sequence analysis of the pre-S deletion mutants amplified from genotype B infected carriers

Case	Deletion mutants	
	Representative sequence	Region (AA)
ASC group		
ASC1	ASC1-1	20-42
ASC2	ASC2-1	58-118
CH group		
CH1	CH1-1	106-126
	CH1-2	1-6 and 102-135
	CH1-3	1-6 and 95-141
	CH1-4	1-6
CH2	CH2-1~6	58-118
CH3	CH3-1	79-111
	CH3-2~3	58-118
	CH3-4~5	102-130
	CH3-6	102-132
CH4	CH4-1	100-140
	CH4-2	94-142
	CH4-3	67-125
CH5	CH5-1	85-122
	CH5-2~4	103-141
CH6	CH6-1~5	87-125
CH7	CH7-1	32-114
	CH7-2	58-118
	CH7-3	50-133
	CH7-4	38-105
	CH7-5	31-123
CH8	CH8-1	121-125
CH9	CH9-1	101-122
LC group		
LC1	LC1-1	58-118
	LC1-2	132-141
LC2	LC2-1	93-126
	LC2-2	119-140
LC3	LC3-1	32-62 and 93-129
LC4	LC4-1	21-59 and 66-74
LC5	LC5-1	102-129
LC6	LC6-1	58-118
LC7	LC7-1	119-128 and 138-141
	LC7-2	1-39 and 119-128
	LC7-3	1-39
LC8	LC8-1	39-48
LC-HCC (LH) group		
LH1	LH1-1	121-138
LH2	LH2-1	1-44
	LH2-2	1-44 and 120-131
LH3	LH3-1	2-8

	LH3-2	115-125
	LH3-3	2-8 and 115-125
	LH3-4	41-83
	LH3-5	41-83 and 115-125
LH4	LH4-1	121-141
	LH4-2	105-132
	LH4-3	32-44 and 101-128
	LH4-4	32-44 and 101-140
LH5	LH5-1	119-130
	LH5-2	11-32 and 119-130
	LH5-3	1-44
	LH5-4	1-44 and 119-130
LH6	LH6-1	94-108
	LH6-2	86-133
	LH6-3	95-142
LH7	LH7-1	99-139
LH8	LH8-1	123-139
	LH8-2	8-123
LH9	LH9-1	94-142
	LH9-2	121-141
LH10	LH10-1	105-150
	LH10-2	8-124
	LH10-3	113-140
NC-HCC (NH)		
NH1	NH1	115-116
NH2	NH2-1	134
NH3	NH3-1	117-136
NH4	NH4-1	120-130
NH5	NH5-1	43-77
	NH5-2	58-118
NH6	NH6-1	100-133
NH7	NH7-1	12-119
NH8	NH8-1	58-118
NH9	NH9-1	100-140
NH10	NH10-1	58-118
	NH10-2	116-126
NH11	NH11-1	119-140
	NH11-2	120-125
	NH11-3	121-134
	NH11-4	120-134
	NH11-5	121-123
NH12	NH12-1	58-118
	NH12-2	58-121
	NH12-3	121-125
NH13	NH13-1	14-108 and 121-123
	NH13-2	121-123
NH14	NH14-1	124-141
	NH14-2	50-74 and 124-141
	NH14-3	65-81 and 124-141
	NH14-4	63-74 and 124-141

ASC: asymptomatic carriers; CH: Chronic hepatitis; HBV: hepatitis B virus; LC: Liver cirrhosis; LC-HCC: Liver cirrhotic hepatocellular carcinoma; NC-HCC: Noncirrhotic hepatocellular

carcinoma.

Table 2 Sequence analysis of the pre-S deletion mutants amplified from genotype C infected carriers

Case	Deletion mutants	
	Representative sequence	Region (AA)
ASC group		
ASC1	ASC1-1	1-7
	ASC1-2	1-7 and 31-37
	ASC1-3	134-138
ASC2	ASC2-1	130-140
CH group		
CH1	CH1-1	132-141
CH2	CH2-1	102-114 and 139-141
CH3	CH3-1	102-122
CH4	CH4-1	16-25 and 100-140
	CH4-2	17-30 and 95-142
	CH4-3	17-27 and 100-140
	CH4-4	100-140
CH5	CH5-1	58-118
CH6	CH6-1	135-141
	CH6-2	124-131 and 135-141
CH7	CH7-1	1-5
	CH7-2	67-103 and 132-141
	CH7-3	132-141
	CH7-4	1-5 and 29-31
	CH7-5	1-5 and 64-127
CH8	CH8-1	65 stop, 66-126
CH9	CH9-1~3	58-118
	CH9-4	56-112
CH10	CH10-1	58-118
CH11	CH11~2	58-118
	CH11-3~4	124-140
LC group		
LC1	LC1-1	104-118
LC2	LC2-1	58-118
LC3	LC3-1	98-140
	LC3-2	62-98
LC4	LC4-1	1-6
	LC4-2	58-118
	LC4-3	133-141
LC5	LC5-1	63-78
	LC5-2	1-67
LC6	LC6-1	137-143
LC7	LC7-1	63-122
LC8	LC8-1	17-43 and 105-141
	LC8-2	17-43 and 109-141

	LC8-3	17-43
	LC8-4	58-118
	LC8-5	1-5 and 58-118
	LC8-6	64-80
LC9	LC9-1	135-142
LC10	LC10-1	133-141
LC11	LC11-1	58-118
	LC11-2	1-6 and 25-49
	LC11-3	3-171
LC12	LC12-1	42-87 and 104-108
	LC12-2	54-54 and 106-142
	LC12-3	106-142
LC13	LC13-1	131-141
	LC13-2	128-141
	LC13-3	1-10 and 128-141
LC14	LC14-1	1-6 and 103-125
	LC14-2	1-7 and 103-125
	LC14-3	103-125
LC-HCC (LH)		
LH1	LH1-1	128-141
LH2	LH2-1	127-142
	LH2-2	15-45
LH3	LH3-1	125-141
LH4	LH4-1	131-140
	LH4-2~3	18-74
	LH4-4	18-74 and 131-141
LH5	LH5-1	62-80 and 136-141
	LH5-2	62-80 and 124-133
	LH5-3	62-80
LH6	LH6-1	3-9 and 65-76
LH7	LH7-1	131-141
LH8	LH8-1	86-126
LH9	LH9-1	55-118
LH10	LH10-1	63-87
LH11	LH11-1	58-118
LH12	LH12-1	65-76
	LH12-2	55-118
NC-HCC (NH)		
NH1	NH1-1	129-141
NH2	NH2-1	66-86
NH3	NH3-1	1-7 and 102-141
	NH3-2	102-141
NH4	NH4-1	2-69
	NH4-2	124

ASC: asymptomatic carriers; CH: Chronic hepatitis; HBV: hepatitis B virus; LC: Liver cirrhosis; LC-HCC: Liver cirrhotic hepatocellular carcinoma; NC-HCC: Noncirrhotic hepatocellular carcinoma.