

Supplemental Table 1: Antibody information

rhAb	Patient	VH	JH	VK/L	JK/ L	HC Mut	Isotype	Human Brain ELISA	Mouse Brain ELISA	Mouse Kidney ELISA	Sy5y ELISA	FLU ELISA	OVA ELISA	Sy5y ICC	Hep2 ICC	Stroke Brain	EAE Brain	Healthy Brain	Sy5y FC
CIS56	ATM4	H4-61	3	L5-45	7	26	ND	+	+	+	+	+	+	C	C	N+G	N+G	N+G	I+E
CIS57	ATM4	H4-59	6	K3-20	5	17	ND	+	+	+	+	+	+	C	C	N+G	N+G	N+G	
CIS59	ATM4	H4-31	4	K2-24	2	15	IgG	+	-	-	+	+	+	C	-	-	-	N+G	
CIS60	ATM4	H4-61	3	K2-30	2	15	IgM	+	-	-	+	-	-	-	-	-	-	N+G	
CIS45	CIS111	H4-59	4	K1-5	2	31	IgG	+	+	+	+	+	+	C	-	N+G	N+G	N+G	
CIS46	CIS111	H4-34	6	K1-39	2	22	IgG	+	-	-	-	-	-	C	-	N+G	G	N+G	
CIS47	CIS111	H4-34	6	K4-1	5	21	IgG	-	-	-	-	-	-	-	-	-	N+G	G	
CIS48	CIS111	H4-39	6	K1-12	2	20	ND	+	+	+	+	-	-	C	-	N+G	G	G	
CIS49	CIS111	H4-34	5	K1-39	5	17	ND	-	-	-	-	-	-	C	-	-	-	-	
CIS52	CIS111	H4-59	2	L1-44	7	36	ND	+	-	-	-	-	-	-	-	-	-	-	
CIS05	CIS353	H4-39	4	K3-20	5	17	ND	-	-	-	-	-	-	-	-	-	-	-	
CIS06	CIS353	H3-23	3	K4-1	3	25	IgG	-	-	-	-	-	-	-	-	-	-	-	
CIS19	CIS353	H4-b	3	K1-5	2	28	IgG	+	+	+	+	+	+	C	-	N+G	N+G	N+G	I
CIS20	CIS353	H4-59	3	K1-33	2	18	IgG	+	-	-	-	-	-	-	-	-	-	-	
CIS21	CIS353	H4-39	5	K3-20	5	18	ND	+	-	-	+	-	-	C	-	-	-	-	
CIS22	CIS353	H4-4	1	K1-5	2	12	IgG	+	-	-	-	-	-	C	-	-	-	-	
CIS23	CIS353	H3-21	4	K3-20	5	23	IgG	+	-	-	-	-	-	C	C	-	-	-	
CIS26	CIS353	H4-b	3	L1-47	3	28	IgG	-	+	-	-	-	-	C	-	-	N+G	N+G	
CIS09	CIS431	H4-4	4	K3-11	5	10	ND	-	-	-	-	-	-	C	-	-	-	-	
CIS10	CIS431	H3-30	4	K1-5	4	32	ND	+	-	-	+	-	-	N	-	-	-	-	
CIS35	CIS431	H4-59	4	L2-14	1	12	IgM	-	-	-	-	-	-	-	-	-	-	N+G	
CIS42	CIS431	H4-30	4	L2-23	7	15	ND	+	+	+	+	-	-	C	C	N+G	N+G	N+G	I
CIS44	CIS431	H4-59	6	L2-8	3	20	ND	+	+	-	-	-	-	C	-	N+G	-	N+G	
CIS07	CIS683	H4-59	5	K3-20	5	26	IgG	-	-	-	-	-	-	-	-	G	G	G	
CIS08	CIS683	H3-23	6	K3-11	5	22	ND	-	-	-	-	-	-	-	-	-	-	-	
CIS28	CIS683	H4-59	5	K3-11	5	8	IgG	+	+	+	+	+	+	C	N	N+G	N+G	N+G	I
CIS29	CIS683	H3-23	3	K1-5	2	20	IgG	+	-	-	-	-	-	C	-	-	-	-	
CIS34	CIS683	H4-34	4	L3-10	2	5	IgG	-	-	-	-	-	-	C	N	N+G	N+G	N+G	
CIS67	CIS799	H4-30	4	K2-30	2	17	ND	-	-	-	-	-	-	-	-	-	-	-	
CIS68	CIS799	H4-38	4	K1-5	5	16	ND	+	+	-	+	-	-	C	N	N+G	N+G	N+G	-
CIS69	CIS799	H4-30	6	K1-27	5	11	ND	-	-	-	-	-	-	-	-	-	-	-	
CIS70	CIS799	H3-30	4	K3-20	5	31	IgG	-	-	-	-	-	-	-	-	-	-	-	
CIS76	CIS799	H4-39	2	L6-57	3	23	ND	+	-	-	-	-	-	-	-	N+G	N+G	N+G	
CIS71	CIS924	H4-4	5	K1-9	2	19	IgG	-	-	-	-	-	-	C	-	-	-	-	
CIS72	CIS924	H4-34	6	L2-14	2	13	ND	-	-	-	-	-	-	-	-	G	N+G	G	
CIS73	CIS924	H4-31	4	K1-12	2	12	IgG	-	-	-	-	-	-	-	-	N+G	G	G	
CIS74	CIS924	H3-30	4	K1-39	5	26	IgM	-	-	-	-	-	-	-	-	-	-	-	
CIS75	CIS924	H3-23	5	K1-17	5	20	ND	-	-	-	-	-	-	-	-	-	-	-	
NMO01	NMO.01	H4-30	5	L2-8	2	27	IgG	-	-	-	-	-	-	-	-	-	-	-	
NMO02	NMO.01	H4-39	4	K1-5	2	7	IgM	-	-	-	-	-	-	C	-	-	-	-	I
NMO03	NMO.01	H4-39	4	L2-23	2	6	IgM	+	+	-	+	-	-	C	N+G	N+G	N+G	N+G	
NMO04	NMO.01	H4-39	4	L2-23	2	1	IgM	-	-	-	-	-	-	-	-	-	-	-	
NMO05	NMO.01	H3-7	3	K2-30	2	23	IgM	-	-	-	-	-	-	-	-	-	-	-	
NMO06	NMO.02	H4-59	6	L6-57	3	9	IgG	+	+	+	+	+	-	N	-	N+G	N+G	N+G	-
NMO07	NMO.07	H4-4	6	K3-20	4	11	IgG	-	-	-	-	-	-	-	-	-	-	-	
NMO08	NMO.07	H3-30	6	K2-28	2	12	IgG	-	-	-	-	-	-	C	-	-	-	-	
NMO09	NMO.08	H4-31	4	K3-20	2	33	IgM	-	-	-	-	-	-	-	-	G	G	G	
NMO10	NMO.08	H4-39	3	K3-15	2	15	ND	+	-	-	+	-	-	-	-	-	-	-	

Bold = VH4 antibodies

Thin = VH3 antibodies

White = VK antibodies

Gray = VL antibodies

+ = Positive

- = Negative

Blank = not tested

N = Nuclear

C = Cyto-

plasmic

N = Neurons

G = Glia

I = Intracellular

E = Extracellular