

Table 11: Rev

MAB ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species (Isotype)
224 4G9	Rev(5–15)	Rev(5–15)	SGDSDEELIRT?		<i>E. coli</i> expressed rec Rev	murine()
References: [Jensen (1997)]						
• 4G9: Mapped binding location by protein footprinting [Jensen (1997)]						
225 Ab2	Rev(32–50)	Rev(32–49 BRU)	EGTRQARRRRRRWRERQR		rec Rev	(IgG ₁)
Donor: Tony Lowe and Jonathan Karn, MRC Center, Cambridge						
References: [Henderson & Percipalle(1997)]						
• Ab2: The Ab2 binding site overlaps the nuclear localization signal – Ab2 binding to Rev was blocked by bound HIV RNA – the cellular protein importin- β can bind in this Arg rich region – atypically, the Rev binds specifically to importin- β , but not to the importin- β -importin- α dimer [Henderson & Percipalle(1997)]						
226 10.1	Rev(33–48)	Rev(33–48)	GTRQARRRRRRWRER?			()
References: [Ovod (1992), Ranki (1994), Ranki (1995)]						
• 10.1: Binds to the RRE – polyclonal anti-Rev Ab detected Rev in astrocytes in 4/5 brain autopsy samples, but only one of these was positive using 10.1, suggesting most Rev was bound to RRE [Ranki (1995)]						
227 3H6	Rev(38–43)	Rev(38–44)	RRNRRR		rec Rev	murine(IgG ₁ κ)
References: [Orsini (1995)]						
• 3H6: There is another MAB with this ID that recognizes gp41 [Pinter (1995)]						
• 3H6: Directed against nucleolar localization/RRE binding domain – antigenic domain tentative, MAB failed to bind a RRNRRR Rev deletion mutant [Orsini (1995)]						
228 9G2	Rev(70–84)	Rev(70–84)	PVPLQLPPLERLTLTD		<i>E. coli</i> expressed rec Rev	murine(IgG _{2a} κ)
Donor: Anne Marie Szilvay						
References: [Kalland (1994a), Jensen (1997)]						
• 9G2: Worked in indirect immunofluorescence and also detected Rev in WB assays – used to detect localization of Rev throughout the cell [Kalland (1994a)]						
• 9G2: Peptide interaction mapped to aa 70-84, 75–88 – protein footprint to 65–88 [Jensen (1997)]						
• 9G2: Called 9G2G4D6E8: UK Medical Research Council AIDS reagent: ARP3058						

Table of HIV MAbs

MAB ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species (Isotype)
229 8E7	Rev(70-84)	Rev(70-84)	PVPLQLPPLRLTLD		<i>E. coli</i> expressed rec Rev	murine(IgG _{2a} κ)
<p>References: [Kalland (1994a), Kalland (1994b), Szilvay (1995), Jensen (1997), Boe (1998)]</p> <ul style="list-style-type: none"> • 8E7: 8E7 worked in indirect immunofluorescence and also detected Rev in WB assays – used to detect localization of Rev in several compartments including the nucleoli, nucleoplasm, perinuclear zone, and cytoplasm – Rev co-localized with host cell factors known to assemble on nascent transcripts – Rev shuttles continuously between cytoplasmic and nucleoplasmic compartments [Kalland (1994a), Kalland (1994b), Szilvay (1995)] • 8E7: Peptide interaction mapped to aa 70-84, 75-88 – protein footprint to 65-88 [Jensen (1997)] • 8E7: HIV-1 RNA and Rev localize to the same region in the nucleoplasm, but the splicing factor SC-35 localizes in different speckles with the nucleoplasm than Rev – intron containing β-globin was distributed similarly to HIV-1, suggesting Rev and HIV-1 RNAs interact at putative sites of mRNA transcriptions and splicing [Boe (1998)] 						
230 Ab4	Rev(72-91)	Rev(72-91 BRU)	PLQLPPLRLTLDNCDCGT		rec Rev	(IgG ₁)
<p>Donor: Tony Lowe and Jonathan Karn, MRC Center, Cambridge</p> <p>References: [Henderson & Percipalle(1997)]</p> <ul style="list-style-type: none"> • Ab4: The binding site overlaps the nuclear export signal – binding was not blocked by bound HIV RNA and may be accessible for protein interaction [Henderson & Percipalle(1997)] 						
231 3G4	Rev(90-116)	Rev(90-116)	TSGTQGVGSPQILVESPTVLE-SGTKE?		rec Rev	murine(IgG ₁ κ)
<p>References: [Orsini (1995)]</p> <ul style="list-style-type: none"> • 3G4: Binds to a region that can be dispensed with and still retain Rev function [Orsini (1995)] 						
232 1G10	Rev(96-105)	Rev(95-105)	GVGSPQILVE		<i>E. coli</i> expressed rec Rev	murine(IgG _{2b} κ)
<p>Donor: Anne Marie Szilvay</p> <p>References: [Kalland (1994a)]</p> <ul style="list-style-type: none"> • 1G10: Bound Rev in indirect immunofluorescence and also detected Rev in WB – used to detect localization of Rev throughout the cell [Kalland (1994a)] • 1G10: Peptide interaction mapped to aa 91-105, 96-110 – protein footprint to aa 10-20, and 95-105 [Jensen (1997)] • 1G10: Called IG10F4: UK Medical Research Council AIDS reagent: ARP3060 						

Table of HIV MAbs

MAB ID	HXB2 Location	Author's Location	Sequence	Neutralizing	Immunogen	Species (Isotype)
233 1G7	Rev(96-105)	Rev(95-105)	GVGSPQLVE		<i>E. coli</i> expressed rec Rev	murine(IgG _{2b} κ)
<p>References: [Kalland (1994a), Jensen (1997)]</p> <ul style="list-style-type: none"> • 1G7: Worked in indirect immunofluorescence and also detected Rev in WB – used to detect localization of Rev throughout the cell [Kalland (1994a)] • 1G7: Peptide interaction mapped to aa 91-105, 96-110 – protein footprint to aa 95-105 [Jensen (1997)] 						
234 Ab3	Rev(102-116)	Rev(102-116 BRU)	ILVESPTVLESDKTE		rec Rev	(IgG ₁)
<p>Donor: Tony Lowe and Jonathan Karn, MRC, Cambridge</p> <p>References: [Henderson & Percipalle(1997)]</p> <ul style="list-style-type: none"> • Ab3: This binding site is at the carboxy end of Rev – Ab3 binding was not blocked by bound HIV RNA [Henderson & Percipalle(1997)] 						
235 2G2	Rev(dis)	Rev(Rev dis)			rec Rev	murine(IgG ₁ κ)
<p>References: [Orsini (1995)]</p> <ul style="list-style-type: none"> • 2G2: Does not bind to any of a set of glutathione S-transferase (GST) Rev fusion proteins, or to Rev in a RIPA buffer, suggesting a conformational epitope [Orsini (1995)] 						