

Table 7: **Rev**

MAb ID	Location	WEAU	Sequence	Neutralizing	Immunogen	Species(Isotype)
210 4G9	Rev(5-15)	Rev(5-15)		L P (when lipidated)	E. coli expressed r Rev	murine
	Donor: AGMED, Inc., Bedford, MA USA References: [Jensen et al.(1997)] NOTES: <ul style="list-style-type: none"> • 4G9: Mapped binding location by protein footprinting [Jensen et al.(1997)] 					
211 10.1	Rev(33-48)					
	Donor: AGMED, Inc., Bedford, MA USA References: [Ovod et al.(1992), Ranki et al.(1994), Ranki et al.(1995)] NOTES: <ul style="list-style-type: none"> • 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 et al.(1995)] 					
212 3H6	Rev(38-44)	Rev(38-43)	RRNRRR		rec Rev	murine(IgG _{1κ})
	Donor: AGMED, Inc., Bedford, MA USA References: [Orsini et al.(1995)] NOTES: <ul style="list-style-type: none"> • 3H6: There is another MAb with this ID that recognizes gp41 [Printer et al.(1995)] • 3H6: Directed against nucleolar localization/RRE binding domain – antigenic domain tentative, MAb failed to bind a RRNRRR Rev deletion mutant [Orsini et al.(1995)] 					
213 Ab2	Rev(32-49 BRU)	Rev(32-49)	EGTRQARRRNRWRER- QR		rec Rev	(IgG ₁)
	Donor: Tony Lowe and Jonathan Karn, MRC Center, Cambridge References: [Henderson & Percipalle(1997)] NOTES: <ul style="list-style-type: none"> • 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)] 					

HIV Monoclonal Antibodies

MAb ID	Location	WEAU	Sequence	Neutralizing	Immunogen	Species(Isotype)
214 9G2	Rev(70-84)	Rev(70-84)	PVPLQLPPLERLTLDD		E. coli expressed r Rev	murine(IgG _{2aκ})
	<p>Donor: Anne Marie Szilvay References: [Kalland et al.(1994a), Jensen et al.(1997)] NOTES:</p> <ul style="list-style-type: none"> • 9G2: Worked in indirect immunofluorescence and also detected Rev in WB assays – used to detect localization of Rev throughout the cell [Kalland et al.(1994a)] • 9G2: Peptide interaction mapped to aa 70-84, 75-88 – protein footprint to 65-88 [Jensen et al.(1997)] • 9G2: Called 9G2G4D6E8: UK Medical Research Council AIDS reagent: ARP3058 					
215 8E7	Rev(70-84)	Rev(70-84)	PVPLQLPPLERLTLDD		E. coli expressed r Rev	murine(IgG _{2aκ})
	<p>Donor: Anne Marie Szilvay References: [Kalland et al.(1994a), Kalland et al.(1994b), Szilvay et al.(1995), Jensen et al.(1997), Boe et al.(1998)] NOTES:</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 et al.(1994a), Kalland et al.(1994b), Szilvay et al.(1995)] • 8E7: Peptide interaction mapped to aa 70-84, 75-88 – protein footprint to 65-88 [Jensen et al.(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 et al.(1998)] 					
216 Ab4	Rev(72-91 BRU)	Rev(72-91) CGT	PLQLPPLERLTLDCNED- CGT		rec Rev	(IgG ₁)
	<p>Donor: Tony Lowe and Jonathan Karn, MRC Center, Cambridge References: [Henderson & Percipalle(1997)] NOTES:</p> <ul style="list-style-type: none"> • Ab4: The binding site overlaps the nuclear export signal – Ab2 binding was not blocked by bound HIV RNA and may be accessible for protein interaction [Henderson & Percipalle(1997)] 					

HIV Monoclonal Antibodies

Mab ID	Location	WEA/U	Sequence	Neutralizing	Immunogen	Species(Isotype)
217 3G4	Rev(90-116) Donor: Tony Lowe and Jonathan Karn, MRC Center, Cambridge References: [Orsini et al.(1995)] NOTES:	Rev	?		rec Rev protein	murine(IgG _{1κ})
	<ul style="list-style-type: none"> • 3G4: Binds to a region that can be dispensed with and still retain Rev function [Orsini et al.(1995)] 					
218 IG10	Rev(95-105) Donor: Anne Marie Szilvay References: [Kalland et al.(1994a)] NOTES:	Rev(96-105)	GVGSPQLIVE		E. coli expressed r Rev	murine(IgG _{2bκ})
	<ul style="list-style-type: none"> • IG10: Bound Rev in indirect immunofluorescence and also detected Rev in WB – used to detect localization of Rev throughout the cell [Kalland et al.(1994a)] • IG10: Peptide interaction mapped to aa 91-105, 96-110 – protein footprint to aa 10-20, and 95-105 [Jensen et al.(1997)] • IG10: Called IG10F4: UK Medical Research Council AIDS reagent: ARP3060 					
219 IG7	Rev(95-105) Donor: Anne Marie Szilvay References: [Kalland et al.(1994a), Jensen et al.(1997)] NOTES:	Rev(96-105)	GVGSPQLIVE		E. coli expressed r Rev	murine(IgG _{2bκ})
	<ul style="list-style-type: none"> • IG7: Worked in indirect immunofluorescence and also detected Rev in WB – used to detect localization of Rev throughout the cell [Kalland et al.(1994a)] • IG7: Peptide interaction mapped to aa 91-105, 96-110 – protein footprint to aa 95-105 [Jensen et al.(1997)] 					
220 Ab3	Rev(102-116 BRU) Donor: Tony Lowe and Jonathan Karn, MRC, Cambridge References: [Henderson & Percipalle(1997)] NOTES:	Rev(102-116)	II VESPTVLES DKTE		rec Rev	(IgG ₁)
	<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)] 					
221 2G2	Rev(dis) Donor: Tony Lowe and Jonathan Karn, MRC, Cambridge References: [Orsini et al.(1995)] NOTES:	Rev(dis)	DISCONTINUOUS		rec Rev protein	murine(IgG _{1κ})
	<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 et al.(1995)] 					