

THE OPIOID PEPTIDE DYNORPHIN A INDUCES LEUKOCYTE RESPONSES
VIA INTEGRIN Mac-1 ($\alpha_M\beta_2$, CD11b/CD18)

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Wild Type	Peptide	Signal	Peptide	Signal	Peptide	Signal	Peptide	Signal	Peptide	Signal	Peptide	Signal	Peptide	Signal	Peptide	Signal		
Mutants	YGGFLRRIR	4	FLRRIRPLK	4	RIRPKLKW	4	PKLKW	4	KW	4	NQ	3	RYGGFLRRQ	4	GFLRRQFKV	3	RRQFKVVGG	1
	YGGFLDRIR	1	FLDRIRPLK	3	DIRPKLKW	3	PELKW	NB	EWDNQKRYG	3	NQERYGGFL	NB	DYGGFLRRQ	3	GFLDRQFKV	3	DRQFKVVGG	2
	YGGFLRRID	2	FLRRIDPLK	2	RIDPKLKW	2	PKLEW	NB	KW	NB	NQDYGGFL	NB	RYGGFLDRQ	2	GFLDRQFKV	2	RDQFKVVGG	1
	YGGFLDDIR	NB	FLDRIRPLE	NB	DIRPELKW	NB	PELEW	NB	EWDNQERYG	NB	NQEDYGGFL	NB	RYGGFLRDQ	1	GFLDDQFKV	NB	DDQFKVVGG	NB
	YGGFLRDID	NB	FLRRIDPLE	NB	RIDPELKW	NB	PKLEW	NB	EWDNQKDYG	NB			DYGGFLDRQ	NB	GFLDRQFEV	NB	DRQFEVGG	NB
	YGGFLDRID	NB	FLRRIDPLE	NB	DIDPELKW	NB	PKLEW	NB	KW	NB			RYGGFLDDQ	NB	GFLDRQFEV	NB	RDQFEVGG	NB
	YGGFLDDID	NB	FLDDIDPLE	NB	DIDPELKW	NB	PELKW	NB	EWDNQERYG	NB			DYGGFLRDQ	NB	GFLDDQFEV	NB	DDQFEVGG	NB
			FLDDIDPLE	1	DIRPKLEW	NB	PELEW	NB	KW	NB			DYGGFLDDQ	NB	GFLRRQFEV	1	RRQFEVGG	1
			FLDRIDPLK	1	RIDPKLEW	NB												
			FLRDIDPLK	1	DIDPKLEW	NB												
			FLDDIRPLE	NB	RIRPELW	NB												
			FLDRIDPLE	NB	DIDPELW	NB												
			FLRDIDPLE	NB	DIRPELW	NB												
			FLDDIDPLK	NB	RIDPELW	NB												
		FLDDIDPLE	NB	RIRPKLEW	NB													
		FLRRIRPLE	2	RIRPELKW	1													

Figure S1. Identification of residues in dynorphin A critical for α_M I-domain binding. The dynorphin AB-based substitutional peptide libraries with single, double or triple mutations of basic residues were prepared by SPOT synthesis as described in Experimental Procedures. Mutated amino acid residues are shown in red. The membranes with synthesized peptide libraries were incubated with 125 I-labeled α_M I domain and subjected to autoradiography. The α_M I-domain binding was analyzed by densitometry and expressed in arbitrary units with the strongest binding to wild-type peptides assigning a value of 4+. The peptides that partially lost their ability to bind the α_M I-domain were grouped according to their activity and marked as 3+, 2+ and +. The peptides that lost their ability to bind the α_M I-domain are marked with “NB”.