

Supplemental Data

Supplemental Fig. 1

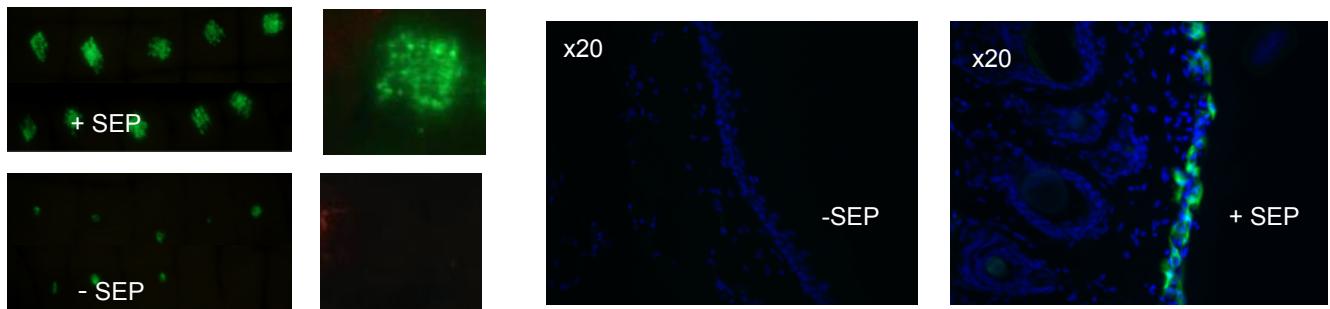
IDM2 immunogen insert amino acid sequence:

MAPIIHRNLTAPELVQWALKLEKDTKLSARGALCVLSYAKTGRSPRDKRVVDTDDVRE
NVDWGSVNVKLSEESFAVKKRAMDFLNSRDHLFIVDCFAGHDERYRLKVRVITARPY
HALFMYNMLIRPTQQELENFGEPEYTIYNAGEHSADPSVPGVTSTSVSLSNFKTGEEVI
LGTEYAGEMKKGILTVMFELMPRQGHLCMHASANVGKKGDVTVFGLSGTGKTTLSA
DPNRMLIGDDEHVWTDRGVFNIEGGCYAKAIGLNPKTEEEIYNAVRFGAVAENCLDK
ATHEIDFNDESICKNTRVAYPLEHIPGALTHAVAGHPNNVIFLTNDAFGMPPVARLTP
QAMFWFIMGYTANVPGVEAGSTPVAKPIFSSCFAGPFLVRHATFYGEQLAKKMTEHN
ARVWLLNTGYAGGRADRGAKRMPLKVTRAVIDAIHDGSLDKEEYCVYPGWGLQIPKR
CARVPAQLLDPRKAWKDVKAFCNETTKELVAMFQASFQKRFAAKASEALKSAVPKYVE
TAHL

PB immunogen insert amino acid sequence:

MAPIIHRNLTVPELVQWALKLEKDTVLSARGTLCVLSYAKTGRSPRDKRVVDTDDVRS
NVDWGSVNMKLSEESFAKAKKHAIDFLNSREHMFVVDCFAGHDERYRLKVRVITARP
YHALFMYNMLIRPTQKELESFGEPEYTIYNAGECSADPSVPGITSKTSVSLSNFKTQEEVI
LGTEYAGEMKKGILTVMFELMPRQGHLCMHASANVGKKGDVTVFGLSGTGKTTLSA
DPNRMLIGDDEHVWTDRGVFNIEGGCYAKAIGLNPKTEEEIYNAVRFGAVAENCRLDK
TTHEIDFNDESICKNTRVAYPLEHIPGALTHAVAGHPRNVIFLTNDAFGMPPVARLTP
QAMFWFIMGYTANVPGVEAGNLPVAKPVFSACFAGPFLVRHATFYGEQLAKKMTEHN
ARVWLLNTGYAGGRADRGAKRMPLKVTRAVIDAIHDGSLDREEYIVYPGWGLHIPKKC
ARVPSHLLDPRKAWKDVKAFCNHTAKELVMMFQESFEKRFASKASDALSAVPKYVEC
AHL

Supplemental Figure 2



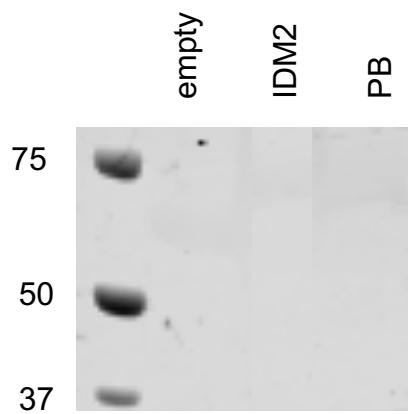
Intradermal delivery of GFP to guinea pig skin with or without SEP

Supplemental Figure 3

	10	20	30	40	50
IDM2:	MAPIIHRNLT	APELVQWALK	LEKDT KLSAR	GALCVLSYAK	TGRSPRDKRV
PB:	MAPIIHRNLT	VPELVQWALK	LEKDT VLSAR	GTLCVLSYAK	TGRSPRDKRV
	60	70	80	90	100
IDM2:	VDTDDVRENV	DWGSVNVKLS	EESFAKVKKR	AMDFLNSRDH	LFIIVDCFAGH
PB:	VDTDDVRSNV	DWGSVNMKLS	EESFAKAKKH	AIDFLNSREH	MFVVVDCFAGH
	110	120	130	140	150
IDM2:	DERYRLKVRV	ITARPYHALF	MYNMLIRPTQ	QELENFGEPE	YTIYNAGEHS
PB:	DERYRLKVRV	ITARPYHALF	MYNMLIRPTQ	KELESFGEPE	YTIYNAGECS
	160	170	180	190	200
IDM2:	ADPSVPGVTS	TTSVSLNFKT	GEEVILGTEY	AGEMKKGILT	VMFELMPRQG
PB:	ADPSVPGITS	KTSVSLNFKT	QEEVILGTEY	AGEMKKGILT	VMFELMPRQG
	210	220	230	240	250
IDM2:	HLCMHASANV	GKKGDVTVFF	GLSGTGKTTL	SADPNRMLIG	DDEHVWTDRG
PB:	HLCMHASANV	GKKGDVTVFF	GLSGTGKTTL	SADPNRMLIG	DDEHVWTDRG
	260	270	280	290	300
IDM2:	VFNIEGGCYA	KAIGLNPKTE	EEIYNAVRFG	AVAEN C TLDK	A THEIDFNDE
PB:	VFNIEGGCYA	KAIGLNPKTE	EEIYNAVRFG	AVAENC R LDK	T THEIDFNDE
	310	320	330	340	350
IDM2:	SICKNTRVAY	PLEHIPGALT	HAVAGHP N NV	IFLTNDAGV	MPPVARLTPE
PB:	SICKNTRVAY	PLEHIPGALT	HAVAGHP R NV	IFLTNDAGV	MPPVARLTPE
	360	370	380	390	400
IDM2:	QAMFWFIMGY	TANVPGVEAG	STPVAKPIFS	SCFAGPFLVR	HATFYGEQLA
PB:	QAMFWFIMGY	TANVPGVEAG	NLPVAKPVFS	ACFAGPFLVR	HATFYGEQLA
	410	420	430	440	450
IDM2:	KKMTEHNARV	WLLNTGYAGG	RADRGAKRMP	LKVTRAVIDA	IHDGSLD KEE
PB:	KKMTEHNARV	WLLNTGYAGG	RADRGAKRMP	LKVTRAVIDA	IHDGSLD REE
	460	470	480	490	500
IDM2:	YCVYPGWGLQ	IPKRCARVPA	QLLDPRKAWK	DVKAFNETTK	ELVAMFQASF
PB:	YIVYPGWGLH	IPKKCARVPS	HLLDPRKAWK	DVKAFNHTAK	ELVMMFQESF
	510	520			
IDM2:	QKRFAAKASE	ALKSAVPKYV	ETAHL		
PB:	EKRFAASKASD	ALKSAVPKYV	EC AHL		

Amino acid sequences of IDM2 and PB, with differences at each position highlighted in red

Supplemental Figure 4



Western blot scan of supernatants from HEK-293T cells that were transfected with IDM2 or PB. We did not detect expression of IDM2 or PB into the media post transfection.