

SM1691B**Monoclonal Antibody to Pk (V5) Epitope Tag (GKPIPPLLGLDST) - Biotin**

Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Host / Isotype:	Mouse / IgG2a
Clone:	SV5-PK1
Immunogen:	Mice were infected with the paramyxovirus SV5, Simian-Virus 5. Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0 Ag14 myeloma cell line.
Format:	State: Liquid purified IgG fraction Purification: Affinity Chromatography on Protein G Buffer System: PBS containing 0.09% Sodium Azide as preservative Label: Biotin
Applications:	ELISA. Western Blot: 1/1000-1/5000. Immunohistochemistry on Frozen Sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises a small epitope, termed Pk, present on the P/V proteins of the paramyxovirus, SV5. This antibody has been used to detect recombinant proteins, some of which include transmembrane and secreted proteins, which have been tagged with this epitope. Usually, a 14 amino acid tag has been added to the recombinant proteins, although a smaller epitope of 9 amino acids (that as a peptide inhibit the binding of the monoclonal antibody to its native protein) has also been successfully used. The 14 amino acid epitope is; gly lys pro <u>ile pro asn pro leu leu gly leu asp</u> ser thr. (the 9 amino acid epitope is underlined)
Add. Information:	This product is manufactured under an exclusive license from the University of St. Andrews, UK.
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Southern JA, Young DF, Heaney F, Baumgärtner WK, Randall RE. Identification of an epitope on the P and V proteins of simian virus 5 that distinguishes between two isolates with different biological characteristics. J Gen Virol. 1991 Jul;72 (Pt 7):1551-7. PubMed PMID: 1713260. 2. Hanke T, Szawlowski P, Randall RE. Construction of solid matrix-antibody-antigen complexes containing simian immunodeficiency virus p27 using tag-specific monoclonal antibody and tag-linked antigen. J Gen Virol. 1992 Mar;73 (Pt 3):653-60. PubMed PMID: 1372038. 3. Randall RE, Hanke T, Young D, Southern JA. Two-tag purification of recombinant

- proteins for the construction of solid matrix-antibody-antigen (SMAA) complexes as vaccines. *Vaccine*. 1993 Sep;11(12):1247-52. PubMed PMID: 7504859.
4. Sanchez Garcia J, Ciuffo LF, Yang X, Kearsey SE, MacNeill SA. The C-terminal zinc finger of the catalytic subunit of DNA polymerase delta is responsible for direct interaction with the B-subunit. *Nucleic Acids Res*. 2004 Jun 1;32(10):3005-16. Print 2004. PubMed PMID: 15173383.
 5. Randall RE, Young D, Hanke T, Szawlowski P, Botting C. Purification of antibody-antigen complexes containing recombinant SIV proteins: comparison of antigen and antibody-antigen complexes for immune priming. *Vaccine*. 1994 Mar;12(4):351-8. PubMed PMID: 8178558.
 6. Hanke, T. et al. (1995) Attachment of epitope to C-terminus of recombinant SIV gp160 facilitates purification while preserving CD4 binding. *J. Virol. Methods* 149-156.
 7. Jaffray, E. et al. (1995) Domain structure of I κ B α and sites of interaction with NF- κ B p65. *Mol. Cell. Biol.* 15: 2166-2172.
 8. Rodriguez MS, Michalopoulos I, Arenzana-Seisdedos F, Hay RT. Inducible degradation of I kappa B alpha in vitro and in vivo requires the acidic C-terminal domain of the protein. *Mol Cell Biol*. 1995 May;15(5):2413-9. PubMed PMID: 7739525.
 9. Arenzana-Seisdedos, F. et al. (1995) Inducible nuclear expression of newly synthesised I κ B α negatively regulates DNA binding and transcriptional activities of NF- κ B. *Mol. Cell. Biol.* 15: 2689-2696.
 10. Hirst, K. et al. (1994) The transcription factor, CDK, its cyclin and their regulator; directing the transcription response to a nutritional signal. *EMBO J.* 13: 5410-5420.
 11. Dunn C, O'Dowd A, Randall RE. Fine mapping of the binding sites of monoclonal antibodies raised against the Pk tag. *J Immunol Methods*. 1999 Apr 22;224(1-2):141-50. PubMed PMID: 10357214.
 12. Young DF, Chatziandreou N, He B, Goodbourn S, Lamb RA, Randall RE. Single amino acid substitution in the V protein of simian virus 5 differentiates its ability to block interferon signaling in human and murine cells. *J Virol*. 2001 Apr;75(7):3363-70. PubMed PMID: 11238862.