OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

SM1691HRP Monoclonal Antibody to Pk (V5) Epitope Tag (GKPIPNPLLGLDST) - HRP

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 containing 0.01% Thiomersal as preservative.
Purification: Affinity Chromatography on Protein G.
Label: HRP – Horseradish Peroxidase

Applications: ELISA.
Western Blot (1/1000).
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, that 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 ile pro asn pro leu leu gly leu asp ser thr. (The 9 amino acid epitope is underlined).

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. 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.
5. Hanke T, Young DF, Doyle C, Jones I, Randall RE. Attachment of an oligopeptide epitope to the C-terminus of recombinant SIV gp160 facilitates the construction of SMAA complexes while preserving CD4 binding. J Virol Methods. 1995 May;53(1):149-56. PubMed PMID: 7543487.
6. Jaffray, E. et al. (1995) Domain structure of IkBa and sites of interaction with NF-kB p65. Mol. Cell. Biol. 15: 2166-2172.
7. 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.
8. Arenzana-Seisdedos, F. et al. (1995) Inducible nuclear expression of newly synthesised IkBa negatively regulates DNA binding and transcriptional activities of NF-kB. Mol. Cell. Biol. 15: 2689-2696.
9. 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.
10. 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.
11. 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.
12. Sanchez Garcia J, Ciufo 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.