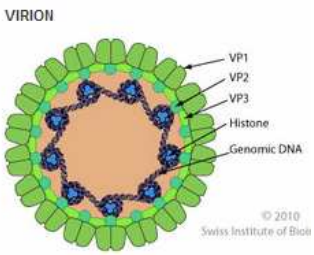
ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Anti- Polyomavirus (KV) Capsid Protein 1 (KVP-1) Antibodies and Controls

□ **Cat #** KVP14-S	**Rabbit** Anti-Polyomavirus (KV) Capsid Protein 1 (KVP-1) antiserum	**SIZE**:100 ul
□ **Cat #** KVP14-C	Recombinant Polyomavirus Capsid Protein 1 (KVP-1) WB positive control	**SIZE** 100 ul

Animals, just like humans, are susceptible to various bacterial and viral infections. Animals are used widely in biomedical research. Laboratory animal infections may compromise the health of the animals and ultimately the research data derived from them. Microbial infections alter not only the animal behavior but also the biological responses. Apart from the use of whole animals for experimentations, numerous animal cell lines and proteins are also derived from animals and used in biomedical research. Animals or animal-derived products are transported from one part of the world to another in a matter of days. So there is great potential for the diseases to spread very quickly. Many infections are asymptomatic and without any overt clinical symptoms. Detection of microbial infections has relied largely on serological screening and presence of microbial antigens or antibodies.



Mouse polyomavirus a member of the family Papovaviridae. It is a dsDNA virus. It has been shown to cause asymptomatic infections in laboratory and wild mice. The virus is one of the few tumor viruses amendable to study in its natural host. When inoculated as newborns, mice of certain genetic backgrounds develop an array of solid tumors arising from at least a dozen distinct cell types. By 3-4 months of age, individual animals typically bear tumors of multiple types and with a combined tumor mass that may approach 25% or more of total body weight. PyV is antigentically different from the K virus (aka pneumotropic Kilham strain). The viruses are distinct from each other after examination with six different restriction endonucleases which revealed no similarities between both DNAs. Studies indicate there is no homology between PyV and the Kilham mouse polyoma virus. Mouse polyoma virus KV strain (mouse pnuemotropic virus or myotis polyoma virus) VP1 (373-aa, protein accession # P24595-1) is highly antigenic protein..

Source of Antigen and Antibodies

Antigen	Recombinant purified full length KVP-VP1 protein.
Ab Host/type	Rabbit, Polyclonal antiserum (Cat # KVP14-S) supplied in 0.05% azide as preservative.
2-Ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control IgG	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

KVP-1 was expressed in E. Coli as his-tag fusion protein (purity >95%, ~65 KDa). Purified KVP-VP1 protein for Western blot +ve control (**Cat #** KVP14-C) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of # KVP14-**C** for good visibility with antibody Cat # KVP14-S. Store at –20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the # KRV14-**C** solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

Form & Storage of Antibodies/Peptide Control

Antiserum

□ 100 ul □ solution □ lyophilized powder

Buffer: PBS+0.05% azide

Reconstitute powder 100 ul of PBS.

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting: An initial dilution of 1:500-2K is recommended for Western. Users must optimize antibody dilution depending upon the nature of samples and other technical conditions.

ELISA (1:10-50K; using 50-100 ng antigen/well).

Histochemistry & Immunofluorescence: not tested.

Specificity & Cross-reactivity

KVP-VP1 murine polyoma virus (373-aa) has high sequence homology with VP1 proteins of pneumotropic virus (88%), mastomys polyoma virus (71%), and squirrel monkey. human, bovine, and hamster polyoma viruses (54-58%). Therefore, anti-murine polyoma virus (#KRV14-S) may potentially crossreacts with VP1 of these related viruses.

References: Schoolermark-van de ven EME (2005) Lab. Animals 40, 137-143; Mayer M (1991) Virology 181, 469-480; Bond S (1978) J. Virol. 28, 337-343;

*This product is for In vitro research use only.

Related material available from ADI

AE-300100-1 RecombiVirus Mouse Polyomavirus (KV, Pneumotropic virus) IgG ELISA Kit, 96 tests
AE-300110-1 RecombiVirus Rat Polyomavirus (KV, Pneumotropic virus) IgG ELISA Kit, 96 tests
KVP11-MNC Mouse Anti-Polyomavirus (KV, Pneumotropic virus) Capsid Protein 1 (VP1) antibody negative control
KVP11-MPC Mouse Anti-Polyomavirus (KV, Pneumotropic virus) Capsid Protein 1 (VP1) antibody Positve control serum
KVP12-RNC Rat Anti-Polyomavirus (KV, Pneumotropic virus) Capsid Protein 1 (VP1) antibody negative control serum
KVP12-RPC Rat Anti-Polyomavirus (KV, Pneumotropic virus) Capsid Protein 1 (VP1) antibody Positive control serum
KVP15-R-10 Recombinant (E. coli, his-tag, ~42 Kda) Mouse Polyoma Virus (KV, Pneumotropic virus) Capsid Protein 1 (VP1), full length (>95% pure)

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