

## Product Information

### Anti-AcV5 antibody, Mouse monoclonal clone ACV5, purified from hybridoma cell culture

Product Number **A2980**

#### Product Description

Anti-AcV5 antibody, Mouse monoclonal, (mouse IgG2b isotype) is derived from the hybridoma ACV5 produced by the fusion of mouse myeloma cells (SP2/0 Ag-14 cells) and splenocytes from C57Bl/6 X Balb/c mice immunized with AcNPV extracellular nonoccluded virus (NOV).<sup>1</sup> The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2.

Monoclonal Anti-AcV5 recognizes a nine amino acid residue tag (SWKDASGWS) of the baculovirus *Autographa californica* GP64 envelope fusion protein (efp).<sup>1</sup> The antibody may be used in immunoblotting,<sup>1-3</sup> immunoprecipitation,<sup>1</sup> dot blot, and immunocytochemistry.<sup>4</sup>

Epitope tagged fusion proteins are widely used in protein analysis of biological samples (e.g. plant cell extracts). Antibodies specific for the tag are a valuable means for the detection of the protein. AcV5 is a monoclonal antibody that recognizes a nine amino acid residue tag (SWKDASGWS) of baculovirus *Autographa californica* GP64 envelope fusion protein (efp). Proteins tagged with this AcV5 peptide are functional in both dicots and monocots plants and show no cross reactivity across many plant species.<sup>5</sup>

GP64 gene open reading frame encodes a protein of 509 amino acids with a molecular weight of 58 kDa. The protein contains N-linked glycosylation sites and hydrophobic N- and C-termini, characteristic of signal and membrane anchor motifs found in envelope glycoproteins. The GP64 protein is present early (6 hr) post infection and accumulates in the infected cell moving to the periphery later.<sup>6</sup>

#### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Antibody Concentration: ~1 mg/mL

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

#### Product Profile

Immunoblotting: a working antibody concentration of 0.5-1 µg/mL is recommended using extracts of *Sf9* cells infected with baculovirus.

**Note**: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

#### References

1. Hohmann, A.W., and Faulkner, P., *Virology*, **125**, 432-444 (1983).
2. Lin, G., et al., *In Vitro Cell Dev. Biol.*, **37**, 293-302 (2001).
3. Slack, J.M., et al., *J. Gen. Vir.*, **82**, 2279-2287 (2001).
4. Slack, J.M., and Blissard, G.W., *J. Gen. Vir.*, **82**, 2519-2529 (2001).
5. Lawrence, S.D., et al., *BioTechniques*, **35**, 488-492 (2003).
6. Blissard, G.W., and Rohrmann, G.F., *Virology*, **170**, 537-555 (1989).

DS,PHC 01/17-1