

## Recombinant ASFV p72 Protein, His-tagged

**Cat. No.** p72-01A    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant African Swine Fever virus (ASFV) p72 antigen, comprising amino acids 40-315, manufactured in E. coli with a His-tag.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Species</b>          | ASFV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>ProteinLength</b>    | 40-315 a.a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Description</b>      | <p>African swine fever virus (ASFV) is a large DNA virus and the only member of family Asfarviridae (Dixon et al., 2013). It infects domestic pigs, wild boars, warthogs, and bush pigs, as well as soft ticks (<i>Ornithodoros erraticus</i>), which likely act as a vector. African swine fever (ASF) is characterized by high morbidity and mortality. It is spreading across Europe and in 2018 was introduced into China, leading to high mortality in domestic pigs (Bao et al., 2019). There are no commercial vaccines available for this disease and so control measures are heavily dependent on detection of nucleic acid, antigen, and antibodies.</p> <p>The genome of ASFV ranges in length from ~170-193 kbp depending on the isolate and contains between 150 and 167 open reading frames (ORFs), which encode 150-200 proteins, with ~50 of them structural, including p30, pp62 and p72 (Jia et al., 2017). For the purpose of serologic detection, p72 antigen is one of the most immunogenic ASFV proteins (Kollnberger et al., 2002), being the major capsid component of viral icosahedrons. It is very important in forming the viral capsid in late stage expression of virus infection (Neilan et al., 2004). The middle portion of the p72</p> |

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protein contains most epitopes tested by monoclonal antibodies, whilst the C-terminal peptide of p72 is generally used for genotyping ASFV isolates by sequencing (Jia et al., 2017; Heimerman et al., 2018).

|                       |                                                                                                                                                                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Form</b>           | Liquid                                                                                                                                                                                                                                            |
| <b>Molecular Mass</b> | 33 kDa                                                                                                                                                                                                                                            |
| <b>Purity</b>         | >95% pure by SDS-PAGE                                                                                                                                                                                                                             |
| <b>Applications</b>   | Suitable for use in ELISA and Western Blot.                                                                                                                                                                                                       |
| <b>Storage</b>        | <p>Short Term Storage: -20 centigrade</p> <p>Long Term Storage: -80 centigrade</p> <p>General Storage Conditions: Centrifuge before opening to ensure complete recovery of vial contents.</p> <p>Freezing: Avoid multiple freeze/thaw cycles.</p> |
| <b>Storage Buffer</b> | 25mM Tris Base, 10mM K <sub>2</sub> CO <sub>3</sub> .                                                                                                                                                                                             |
| <b>Shipping</b>       | Dry ice                                                                                                                                                                                                                                           |

## GENE INFORMATION

|                        |                                                                                                                                                                                                                                                           |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | B646L structural protein p72 [ African swine fever virus ]                                                                                                                                                                                                |
| <b>Official Symbol</b> | B646L structural protein p72 [ African swine fever virus ]                                                                                                                                                                                                |
| <b>Synonyms</b>        | B646L; structural protein p72; structural protein p72; similar to Chlorella virus PBCV-1 major capsid protein, PIR Accession Number A40245; similar to Tipoula iridescent virus type 1 major capsid protein, Swiss-Prot Accession Number P18162; contains |

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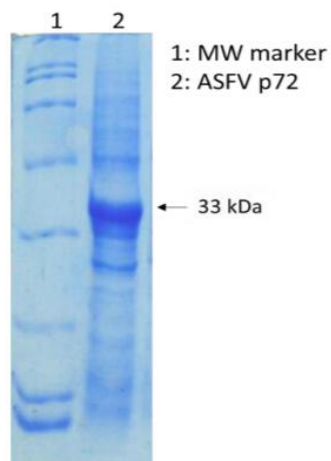
tandem repeats; gene expression: late

**Gene ID** [22220311](#)

**Protein Refseq** [NP\\_042775](#)

**UniProt ID** [P22776](#)

#### SDS-PAGE



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