

Product Data Sheet

□ Cat# CMV15-R-100 Recombinant E.coli Cucumber Mosaic virus Coat Protein (full length, >95% Pure, His-tag) Size: 100 ug

Cucumber mosaic virus (CMV) is a plant pathogenic virus in the family *Bromoviridae*. It is a member of the genus, *Cucumovirus*. CMV is a linear positive-sense, single-stranded RNA virus. Its total genome size is 8.621 kb and is broken into three parts. The largest part is 3.389 kb; the second largest is 3.035 kb and the third largest is 2.197 kb. The RNA is surrounded by a protein coat consisting of 32 copies of a single structural protein which form isometric particles. The virus has a worldwide distribution and a very wide host range. It has one of the widest known host ranges of any plant virus. It can be transmitted from plant to plant both mechanically by sap and by aphids. It can also be transmitted by seeds and parasitic weeds. The virus can be diagnosed by its characteristic viral inclusion bodies. The inclusions can be rhomboidal, may appear hollow, and can form larger aggregates. The inclusions can be found in epidermal, mesophyll, and stomatal cells. Symptoms seen with the virus include leaf mosaic or mottling, yellowing, ringspots, stunting, and leaf, flower, and fruit distortion.

Source and Forms of Protein



Cucumber Mosaic virus Coat protein (Uniprot: P03605) was expressed in E. coli. It contains a c-terminal His-tag. The Coat protein corresponds to the full-length protein. It has a predicted weight of 25 kDa and migrates as a band of approximately 28 kDa in reducing/denaturing conditions. Purified Coat Protein is supplied in a buffer containing PBS pH 7.4 +8M Urea and a preservative.

Storage

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

Long-term: at -20°C or below in suitable aliquots after reconstitution. Can be frozen, but avoid multiple freeze/thaw cycles

Stability: 6-12 months at -20°C or below.

Recommended Usages: This protein is suitable for uses such as an ELISA coating antigen or standard, use as an immunogen, or as a Western Blot positive control.

Western Blotting: Load ~100-200 ng/lane for good visibility with appropriate antibodies.

ELISA: Assay dependent concentration

Protein homology: Cucumber mosaic virus coat protein is highly conserved across various CMV strains (83-100%).

This product is for in vitro research use only.

Related Material available for ADI

Catalog#	Description
TMVMP11-A	Rabbit anti-Tobacco Mosaic Virus (TMV) Movement Protein IgG, affinity pure
TMVMP11-P	Control/Blocking peptide for Tobacco Mosaic Virus Movement Protein
TMV15-R-100	Recombinant E.coli Tobacco Mosaic virus Coat Protein
TMV11-A	Rabbit anti-Tobacco Mosaic virus Coat Protein IgG, affinity pure
TMV-RDT-010	TruStrip RDT Tobacco Mosaic virus (cassette), 25 tests/box
TMV-005-096	Tobacco Mosaic virus Coat protein ELISA Kit, 96 tests, Quantitative
CMV15-R-100	Recombinant E.coli Cucumber Mosaic virus Coat Protein (full length, >95% Pure, His-tag)
CMV11-A	Rabbit anti-Cucumber Mosaic virus Coat Protein IgG, affinity pure

TMV15-R-100

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