

Synthelis®

## Viral Protein

Protein Catalogue

### E1 - Envelope Protein 1

#### Product specification

**Acronym:** E1

**Class:** Envelope protein

**Origin:** Viral

**Molecular weight:** 21 kDa

**Application:** Screening & display technologies, vaccine development

**Purity:** >60%

**Activity:** Proven

**Length:** Full Length

**TMD:** 1

**Biological function:** Binding structural protein

#### Product description

The hepatitis C virus (HCV) envelope proteins E1 and E2 play a key role in host cell entry and represent important targets for vaccine and drug development.

**Protein Source:** E1 wild type protein Amino Acid sequence:

*Fig.1: AA sequence of E1 protein*

```
      10      20      30      40      50
YRNSSGVYHI TNDPNSSIV YETDHHILHL PGCIPCVREG NRSTCWALT
      60      70
PTVAAPYLNA PLESRRHVD
```

**Affinity Tag:** Histidine tag fused to the N-terminal end of the protein.

**Production conditions:** E1 is expressed in a cell-free expression system in the presence of lipid vesicles. 100 µg can be produced and qualified in about 1 week.

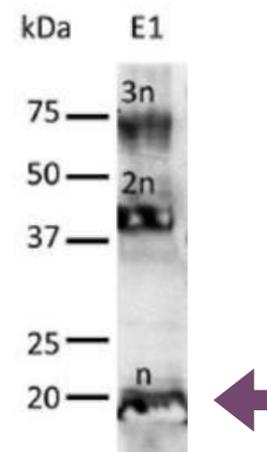
## Quality analysis

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**Purity:** Typically > 60% as determined by SDS-Page and Coomassie Blue staining.

**Purification procedure:** As standard, E1 proteoliposomes are purified on a sucrose gradient. Further purification steps can be added if required.

*Fig.2: Proteoliposome E1 after purification (Western blot identification), n: monomer, 2n: dimer, 3n: trimer.*



## Formulation

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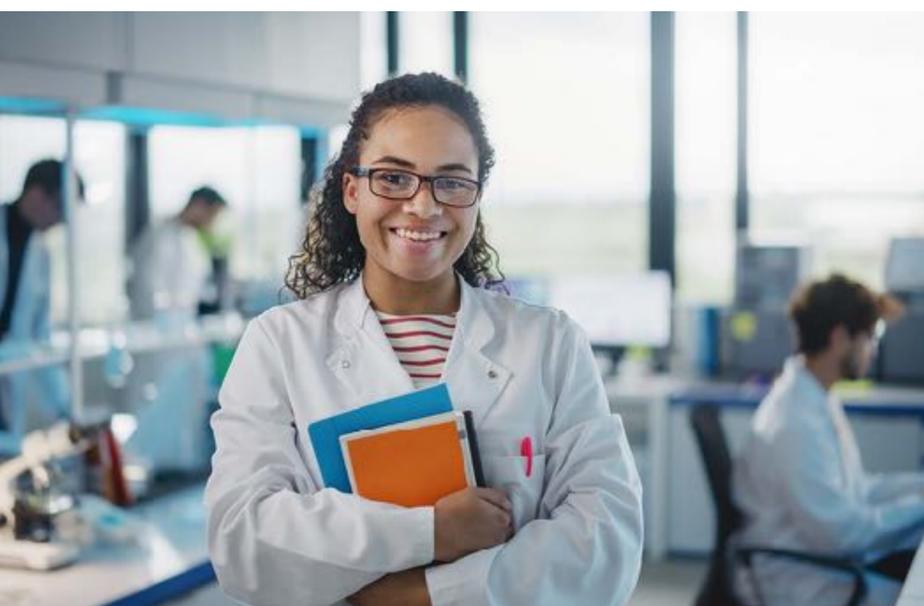
**Buffer:** Available in Tris 50mM, pH 7.5. Other buffers or customized formulation can be provided upon request.

**Customized Hydrophobic matrix:** Customized formulation with specific lipids like PEGylated or biotinylated lipids can be used upon request, as well as targeting molecules.

**Storage/Stability:** Store at +4°C for up to one week or several months at -80°C. Aliquot for storage.  
Do not freeze-thaw after aliquoting.

**Use restrictions:** For life science research use only.

**Available sizes:** 10µg, 20µg, 100 µg, 200 µg, 500 µg, bulk



Need a specific amount, a quote or any additional information?  
Contact-us



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