abcam

Product datasheet

Recombinant Rubella Virus capsid nucleoprotein protein (His tag) ab256430

3 Images

Description

Product name	Recombinant Rubella Virus capsid nucleoprotein protein (His tag)
Purity	> 95 % SDS-PAGE. Buffered in 20mM TRIS-HCl pH8.0, 50mM NaCl, 0.5% SDS. Purified from cell lysate.
Expression system	HEK 293 cells
Accession	P07566
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Rubella virus
Sequence	MASTTPITMEDLQKALEAQSRALRAELAAGASQSRRPRP PRQRDSSTSGD DSGRDSGGPRRRRGNRGRGQRRDWSRAPPPPEERQET RSQTPAPKPSRAP PQQPQPPRMQTGRGGSAPRPELGPPTNPFQAAVARGLR PPLHDPDTEAPT EACVTSWLWSEGEGAVFYRVDLHFTNLGTPPLDEDGRW DPALMYNPCGPE PPAHVVRAYNQPAGDVRGVWGKGERTYAEQDFRVGGTR WHRLLRMPVRGL DGDSAPLPPHTTERIETRSARHPWRIRFGAPQAFLAGLLL ATVAVGTARA
Amino acids	1 to 300
Tags	His tag C-Terminus
Additional sequence information	NP_0628841.1. Strain F-Therien. C-terminal 10 amino acid Gly-Ser linker connecting the protein to a 6xHis tag.
Description	Recombinant Rubella Virus capsid protein (His tag)

Specifications

Our **Abpromise guarantee** covers the use of **ab256430** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Form	Liquid

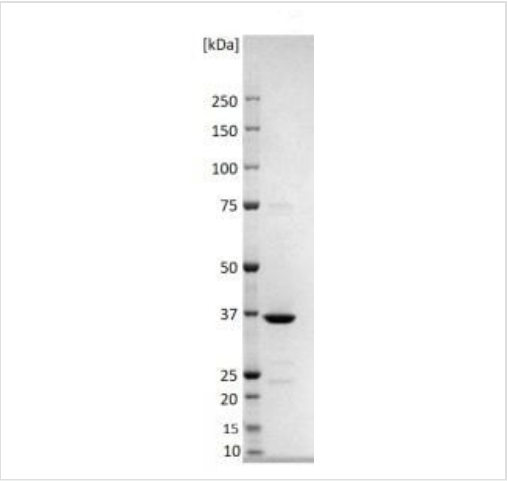
Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 7 Constituents: 0.32% Tris HCl, 0.29% Sodium chloride, 0.5% Sodium lauryl sulfate Sterile filtered. Removal of SDS will result in a concentration-dependent aggregation of the protein.

General Info

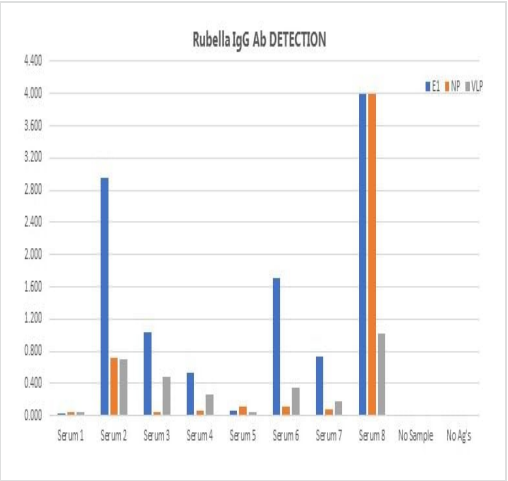
Relevance	Rubella virus is the only member of the Rubrivirus genus of the Togavirus family. Unlike most Togaviruses it is NOT arthropod borne, but is acquired via the respiratory route. It causes German measles (a mild contagious eruptive disease, capable of producing congenital defects in infants born to mothers infected during the first three months of pregnancy). Rubella virus is an enveloped positive-strand RNA virus. The genome encodes two open reading frames (ORFs): the 5'-proximal ORF encodes viral nonstructural proteins (NSP) that are responsible for viral genome replication, while the 3'-proximal ORF encodes three virion structural proteins (SP), the capsid protein (CP), and the two envelope glycoproteins, E2 and E1. During virus assembly, the capsid interacts with genomic RNA to form nucleocapsids. The rubella virus (RV) structural proteins: capsid, E2, and E1 are synthesized as a polyprotein precursor. The signal peptide that initiates translocation of E2 into the lumen of the endoplasmic reticulum remains attached to the carboxy terminus of the capsid protein after cleavage by signal peptidase.
Cellular localization	Cytoplasmic in host cells concentrated around Golgi region and mitochondrion.

Images



SDS-PAGE - Recombinant Rubella Virus capsid protein (ab256430)

SDS-PAGE analysis of ab256430 under reducing conditions.



Functional Studies - Recombinant Rubella Virus capsid protein (ab256430)

Detection of anti-Rubella IgG in human serum.

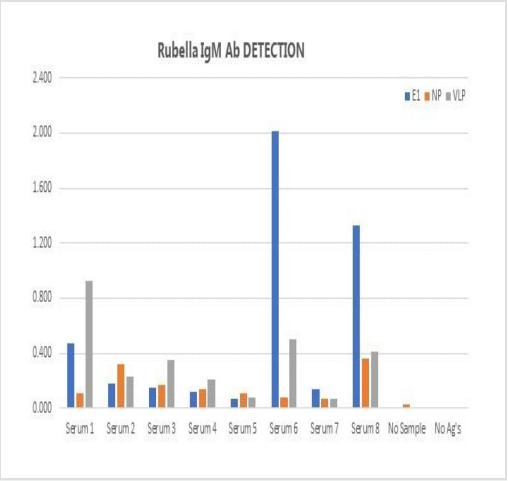
Plate coated with 50 ng/well of antigens. NP = ab256430

Antigens coated in bicarbonate-carbonate buffer pH 9.6 for 1 hour at RT. Blocked with 2% BSA/PBS for 2 hours at RT.

Washed x3 with Tris washing buffer.

Serum samples (Public Health England) diluted 1/201 in 1% BSA in PBS-T.

Secondary antibody was anti-Human-IgG-HRP diluted 1/10000 in 1% BSA in PBS-T. TMB detection.



Functional Studies - Recombinant Rubella Virus capsid protein (ab256430)

Detection of anti-Rubella IgM in human serum.

Plate coated with 100 ng/well of antigens. NP = ab256430

Washed x3 with Tris washing buffer.

Serum samples (Public Health England) diluted 1/201 in 1% BSA in PBS-T + 4% IgG/RF stripper. After standing for 30 minutes the diluted samples were centrifuged at 17,000 x g for 1 minute and the supernatant used for ELISA.

Secondary antibody was anti-Human-IgM-HRP diluted 1/10000 in 1% BSA in PBS-T. TMB detection.

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