



Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection

Julia Noack, Riccardo Bernasconi, Maurizio Molinari

Download now

[Click here](#) if your download doesn't start automatically

Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection

Julia Noack, Riccardo Bernasconi, Maurizio Molinari

Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection Julia Noack, Riccardo Bernasconi, Maurizio Molinari

Coronaviruses (CoVs) are enveloped viruses responsible for severe respiratory diseases in birds and mammals. In infected cells they induce double-membrane vesicles (DMVs) and convoluted membranes (CMs), which are thought to be the site of virus replication. Until recently, both the origin of the CoV-induced vesicles and the exact localization of CoV replication remained unknown. It was assumed that the vesicles derive from the endoplasmic reticulum (ER). Nevertheless no conventional protein markers of the ER, ER-to-Golgi intermediate compartment (ERGIC), Golgi, or coatamer proteins could be detected in these structures. Recent data from our laboratory and others shed light on this mystery. It appears that the Mouse Hepatitis Virus (MHV), a prototype CoV, co-opts ERAD tuning vesicles as replication platforms. These vesicles are released from the ER, but do not contain conventional ER markers or coatamer proteins. Rather, they contain ERAD factors such as SEL1L, EDEM1, and OS-9 that are constitutively cleared from the folding compartment by so called ERAD tuning programs, and display non-lipidated LC3 (LC3-I) periferically associated at their limiting membrane. In MHV-infected cells, the ERAD tuning vesicle markers co-localize with viral non-structural proteins and double-stranded RNA, which are DMV markers. The unconventional role of LC3-I in the MHV infection cycle is further supported by the fact that Atg5 and Atg7, both essential proteins for LC3-I to LC3-II conversion and macroautophagy, are dispensable for CoV replication and DMV formation. These new insights into CoV replication might lead to new therapies to treat CoV infections. They also reveal a novel role for LC3, in its non-lipidated form, in both maintenance of cellular proteostasis and viral infection, the latter function supported by recent findings showing involvement of LC3-I in equine arteritis virus replication.

 [Download Autophagy: Chapter 8. Non-Lipidated LC3 is Essenti ...pdf](#)

 [Read Online Autophagy: Chapter 8. Non-Lipidated LC3 is Essen ...pdf](#)

Download and Read Free Online Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection Julia Noack, Riccardo Bernasconi, Maurizio Molinari

From reader reviews:

Dona Cole:

Do you one of people who can't read satisfying if the sentence chained inside the straightway, hold on guys this aren't like that. This Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection book is readable by means of you who hate those straight word style. You will find the facts here are arrange for enjoyable examining experience without leaving also decrease the knowledge that want to give to you. The writer of Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection content conveys thinking easily to understand by many individuals. The printed and e-book are not different in the content material but it just different in the form of it. So , do you nonetheless thinking Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection is not loveable to be your top listing reading book?

Debera Jessie:

Information is provisions for those to get better life, information these days can get by anyone in everywhere. The information can be a knowledge or any news even an issue. What people must be consider while those information which is within the former life are challenging to be find than now is taking seriously which one is appropriate to believe or which one often the resource are convinced. If you receive the unstable resource then you buy it as your main information you will see huge disadvantage for you. All those possibilities will not happen within you if you take Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection as your daily resource information.

Sally Kim:

The book Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection has a lot details on it. So when you read this book you can get a lot of advantage. The book was published by the very famous author. The author makes some research ahead of write this book. This kind of book very easy to read you can obtain the point easily after reading this book.

David Myers:

Many people spending their time by playing outside along with friends, fun activity along with family or just watching TV all day long. You can have new activity to invest your whole day by looking at a book. Ugh, do you consider reading a book can really hard because you have to bring the book everywhere? It fine you can have the e-book, having everywhere you want in your Cell phone. Like Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection which is keeping the e-book version. So , try out this book? Let's see.

Download and Read Online Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection Julia Noack, Riccardo Bernasconi, Maurizio Molinari #83BG7K1EOFD

Read Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection by Julia Noack, Riccardo Bernasconi, Maurizio Molinari for online ebook

Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection by Julia Noack, Riccardo Bernasconi, Maurizio Molinari Free PDF download, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection by Julia Noack, Riccardo Bernasconi, Maurizio Molinari books to read online.

Online Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection by Julia Noack, Riccardo Bernasconi, Maurizio Molinari ebook PDF download

Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection by Julia Noack, Riccardo Bernasconi, Maurizio Molinari Doc

Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection by Julia Noack, Riccardo Bernasconi, Maurizio Molinari Mobipocket

Autophagy: Chapter 8. Non-Lipidated LC3 is Essential for Mouse Hepatitis Virus Infection by Julia Noack, Riccardo Bernasconi, Maurizio Molinari EPub