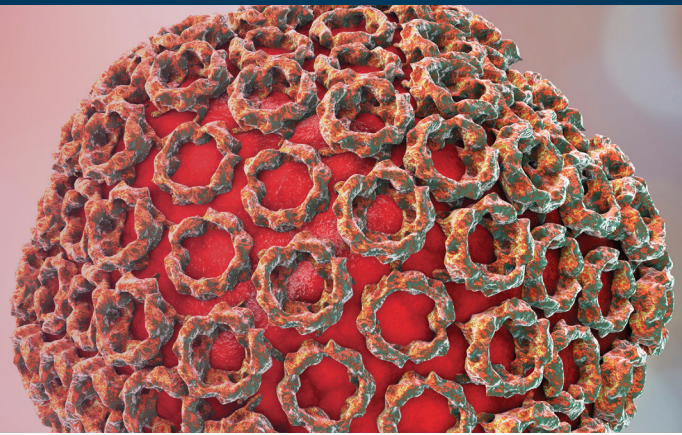




The order Bunyaviridae includes segmented negative-strand RNA viruses, which pose a high risk of outbreaks due to their capability for rapid reassortment. This risk is evidenced by the many diseases they cause in humans, and they are spread by various arthropod, mammal, or rodent vectors (Horne & Vanlandingham, 2014)



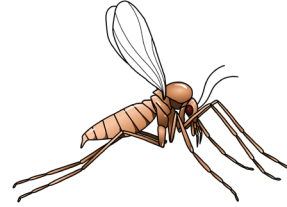
Small mammals or rodents

- Hantaan virus
- Puumala Virus
- Lassa mammarenavirus



Aedes and Culex mosquitoes

- Rift Valley fever



Phlebotomus papatasi sandflies

- Toscana Virus



Ticks

- Crimean–Congo hemorrhagic fever
- Severe fever with thrombocytopenia syndrome

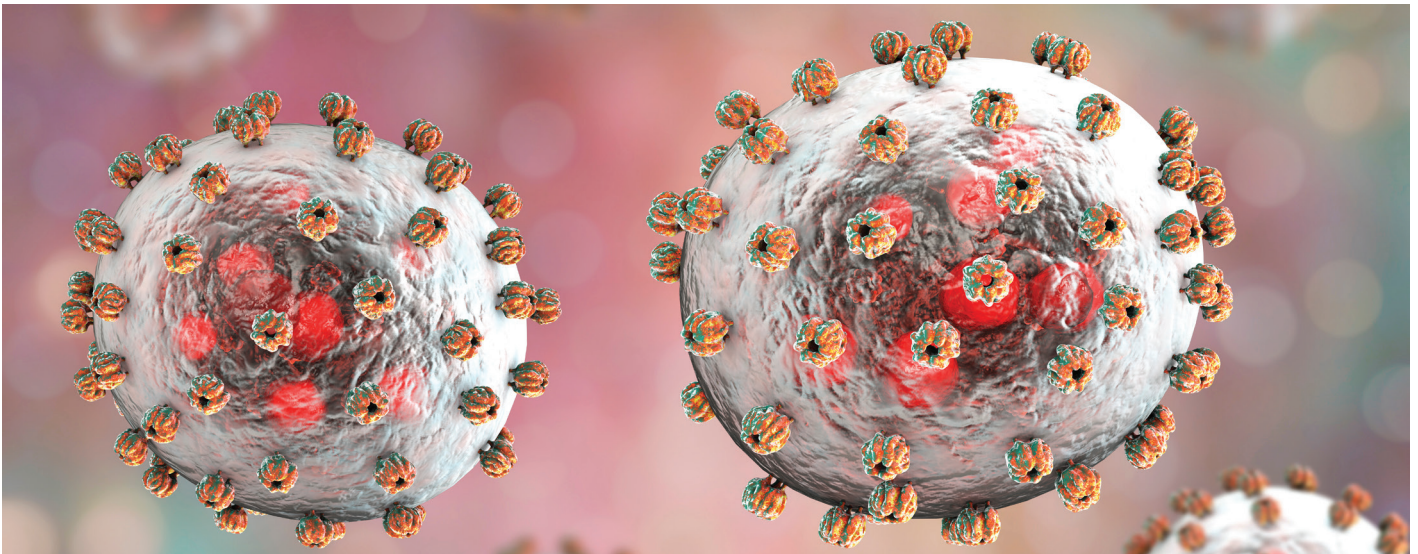
Antigens

The Native Antigen Company offers an extensive range of Bunyaviridae glycoproteins and nucleoproteins expressed as recombinant proteins in our mammalian expression system, bacteria and insects cells showing high sensitivity and specificity in ELISA and rapid test assays. The quality of our products has been proven by the leaders in infectious disease research::

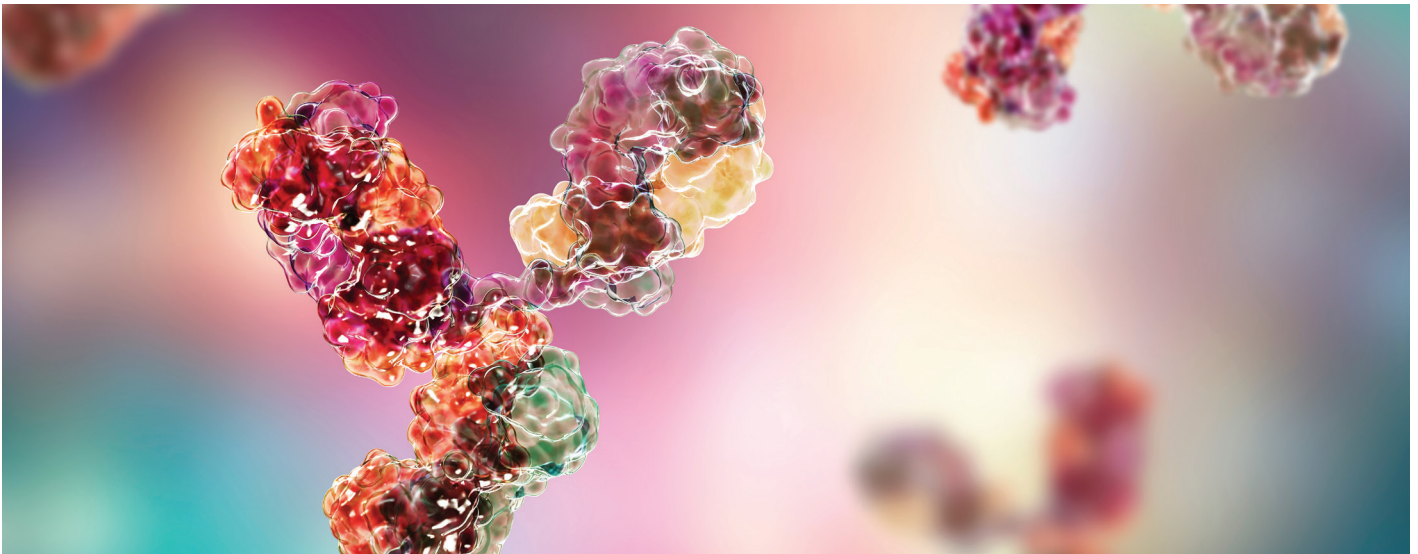
[...]I want to tell you that you have very good product. We use a lot of your proteins for ELISA (my colleague Sofia Appelberg) and this time, I ordered CCHFV Gc and Gn and used them for BRET experiments in cell culture for interaction with a membrane cellular protein and it worked properly. We will publish these data.

Vanessa M. Monteil, PhD

Department of Laboratory Medicine, Karolinska Institutet



Antigen	Mammalian expression (HEK293)	Bacterial expression system (E.coli)	His-Tag	Fc-Tag
Hantaan Virus Nucleoprotein	+	+	+	
Puumala virus glycoprotein G1 (GN)	+	-		+
Puumala virus glycoprotein G2 (Gc)	+	-		+
CCHFV major glycoprotein (Gc)	+	-		Both human and sheep Fc Tags available.
CCHFV glycoprotein N (Gn)	+	-	+	
CCHFV Nucleoprotein	+	-	+	
CCHFV Glycoprotein 38 (gp38)			Strep-His-Tag	
SFTSV Nucleoprotein	+	-	+	
Rift Valley Fever Virus Nucleoprotein	+	-	+	
Toscana virus glycoprotein G2 (Gc)	+	-		+
Lassa Fever Virus GP1 Protein	+			Human, mouse and sheep Fc Tags available.
Lassa Fever Virus GP2 Protein	+			Human, mouse and sheep Fc Tags available.



Antibodies

We have an extensive range of antibodies for infectious disease targets, including a unique panel of Bunyaviridae antibodies designed to enable research and develop of reliable IVD assays. Contact us to enquire about the ELISA matched pair recommendations. nac.contact@lgcgroup.com

Bunyaviridae virus	Anti-nucleoprotein	Anti-glycoprotein	Anti-nucleocapsid	Fc-Tag
Hantaan	-	-	Available clones: 4956, 4957 and 4958.	
Crimean-Congo Hemorrhagic Fever Virus	Clone BA11 available.	Gn, Gc and GP38, including multiple clones available.	-	+
Severe fever with thrombocytopenia syndrome	Available clones: JA4, DC12 and AF10.			+
Rift Valley Fever Virus	Available clones: M977, M979, M978, M975, GG3, DE1, AA11, IA4, M980, M976.			Both human and sheep Fc Tags available.
Lassa mammarenavirus	-	Available clones: HA6, HD7, IF11	-	

Custom solutions

If you have a unique need in the space of viral antigens or antibodies, we can offer our experience to collaborate in a bespoke development project. Our specialized team can produce native antigens, antibodies, and viral lysates, with options for further downstream purification. We operate to BSL-2 standards and offer multiple validated options for inactivating viruses, as well as multiple conjugation options.

Email: nac.contact@lgcgroup.Com

Telephone: +44 (0)1865 595230

References

Horne, K. and Vanlandingham, D. (2014) 'Bunyavirus-vector interactions', *Viruses*, 6(11), pp. 4373–4397. doi:10.3390/v6114373.

