

### Vaxxinova US, Inc. Issued Patents

<b>Title</b>	<b>Patent Number</b>	<b>Country</b>	<b>Patent Owner</b>
Immunizing Compositions and Methods of Use	PI0206293-3	BR	Epitopix, LLC
Compositions Produced Using Enteric Pathogens and Methods of Use	8,119,147	US	Vaxxinova, US, Inc.
Compositions Produced Using Enteric Pathogens and Methods of Use	9,109,028	US	Vaxxinova, US, Inc.
Compositions Produced Using Enteric Pathogens and Methods of Use	9,463,230	US	Vaxxinova, US, Inc.
Compositions Produced Using Enteric Pathogens and Methods of Use	9,925,253	US	Vaxxinova, US, Inc.
Compositions Produced Using Enteric Pathogens and Methods of Use	9,981,026	US	Vaxxinova, US, Inc.
Compositions Produced Using Enteric Pathogens and Methods of Use	9,943,581	US	Vaxxinova, US, Inc.
Compositions Produced Using Enteric Pathogens and Methods of Use	9,950,052	US	Vaxxinova, US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	8,007,811	US	Vaxxinova, US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	8,025,885	US	Vaxxinova, US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	8,007,803	US	Vaxxinova, US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	8,709,436	US	Vaxxinova, US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	8,709,760	US	Vaxxinova, US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	9,266,944	US	Vaxxinova, US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	8,961,979	US	Vaxxinova, US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	9,623,076	US	Vaxxinova, US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	9,981,028	US	Vaxxinova, US, Inc.
Polypeptides From Staphylococcus Aureus and Methods of Use	1853306	EP	Epitopix, LLC
Polypeptides From Staphylococcus Aureus and Methods of Use	2,597,263	CA	Epitopix, LLC
Polypeptides From Staphylococcus Aureus and Methods of Use	1853306	GB	Epitopix, LLC
Polypeptides From Staphylococcus Aureus and Methods of Use	60 2006 049 349.5	DE	Epitopix, LLC
Polypeptides From Staphylococcus Aureus and Methods of Use	1853306	FR	Epitopix, LLC

Polypeptides From Staphylococcus Aureus and Methods of Use	1853306	NL	Epitopix, LLC
Polypeptides From Staphylococcus Aureus and Methods of Use	502016000087717	IT	Epitopix, LLC
Campylobacter Polypeptides and Methods of Use	10,086,059	US	Vaxxinova US, Inc.
Campylobacter Polypeptides and Methods of Use	1678316	EP	Epitopix, LLC
Campylobacter Polypeptides and Methods of Use	287394	MX	Epitopix, LLC
Campylobacter Polypeptides and Methods of Use	1678316	GB	Epitopix, LLC
Campylobacter Polypeptides and Methods of Use	602004034016.2	DE	Epitopix, LLC
Campylobacter Polypeptides and Methods of Use	1678316	FR	Epitopix, LLC
Campylobacter Polypeptides and Methods of Use	1678316	NL	Epitopix, LLC
Fusobacterium Polypeptides and Methods of Use	9,458,204	US	Vaxxinova US, Inc.
Fusobacterium Polypeptides and Methods of Use	9,487,564	US	Vaxxinova US, Inc.
Fusobacterium Polypeptides and Methods of Use	10,183,974	US	Vaxxinova US, Inc.
Fusobacterium Polypeptides and Methods of Use	291272	MX	Epitopix, LLC
Yersinia SPP Polypeptides and Methods of Use	8,563,004	US	Vaxxinova US, Inc.
Yersinia SPP Polypeptides and Methods of Use	9,085,612	US	Vaxxinova US, Inc.
Yersinia SPP Polypeptides and Methods of Use	9,109,018	US	Vaxxinova US, Inc.
Yersinia SPP Polypeptides and Methods of Use	9,085,613	US	Vaxxinova US, Inc.
Yersinia SPP Polypeptides and Methods of Use	9,221,899	US	Vaxxinova US, Inc.
Yersinia SPP Polypeptides and Methods of Use	9,352,029	US	Vaxxinova US, Inc.
Yersinia SPP Polypeptides and Methods of Use	9,801,932	US	Vaxxinova US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	9,932,373	US	Vaxxinova US, Inc.
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	2411046	EP	Epitopix, LLC
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	6092933	JP	Epitopix, LLC
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	2411046	GB	Epitopix, LLC
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	602010047182.90	DE	Epitopix, LLC
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	2411046	FR	Epitopix, LLC
Polypeptides and Immunizing Compositions Containing Gram Positive Polypeptides and Methods of Use	2411046	BE	Epitopix, LLC
Proteins and Immunizing Compositions Containing Klebsiella Proteins and Methods of Use	7222711	JP	Epitopix, LLC
Proteins and Immunizing Compositions Containing Klebsiella Proteins and Methods of Use	11,000,582	US	Vaxxinova US, Inc.
Proteins and Immunizing Compositions Containing Klebsiella Proteins and Methods of Use	11,872,273	US	Vaxxinova US, Inc.
Proteins and Immunizing Compositions Containing Klebsiella Proteins and Methods of Use	411525	MX	Epitopix, LLC

Polypeptides and Immunizing Compositions Containing Burkholderia Polypeptides and Methods of Use	10,100,093	US	Vaxxinova US, Inc.
Polypeptides and Immunizing Compositions Containing Bacillus Polypeptides and Methods of Use	10,166,280	US	Vaxxinova US, Inc.
Polypeptides of Fusobacterium and Methods of Use	11,235,049	US	Vaxxinova US, Inc.
Polypeptides of Fusobacterium and Methods of Use	11,439,699	US	Vaxxinova US, Inc.
Polypeptides of Fusobacterium and Methods of Use	12,171,823	US	Vaxxinova US, Inc.
Polypeptides of Fusobacterium and Methods of Use	12,178,866	US	Vaxxinova US, Inc.
Engineered Proteins and Methods of Use	11,318,192	US	Vaxxinova US, Inc.
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	10,967,056	US	Vaxxinova US, Inc.
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	11,696,945	US	Vaxxinova US, Inc.
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	12,233,120	US	Vaxxinova US, Inc.
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	3579864In	EP	Epitopix, LLC
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	3579864	DE	Epitopix, LLC
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	3579864	FR	Epitopix, LLC
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	3579864	GB	Epitopix, LLC
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	3579864	IT	Epitopix, LLC
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	7183168	JP	Epitopix, LLC
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	413,516	MA	Epitopix, LLC
Proteins and Immunizing Compositions Containing Pasteurella Proteins and Methods of Use	3579864	NL	Epitopix, LLC
Enzyme-Linked Immunosorbent Assay (ELISA) for the Detection of Anti-Mycoplasma Hyorhinis IGG in Swine Serum	10,996,222	US	Vaxxinova US, Inc.
Haemophilus Parasuis Vaccine Serovar Type Four	9,504,740	US	Vaxxinova US, Inc.
Haemophilus Parasuis Vaccine Serovar Type Four	373395	MX	Newport Laboratories, Inc.

Haemophilus Parasuis Vaccine Serovar Type Four	2926190	CA	Newport Laboratories, Inc.
Influenza C Virus and Vaccine	BR112014018278-7	BR	Newport Laboratories, Inc.
Influenza C Virus and Vaccine	9,278,999	US	Newport Laboratories, Inc.
Influenza C Virus and Vaccine	6257529	JP	Newport Laboratories, Inc.
Influenza C Virus and Vaccine	360831	MX	Newport Laboratories, Inc.
Influenza C Virus and Vaccine	2862328	CA	Newport Laboratories, Inc.
Streptococcus Suis Vaccines to Protect Against Reproductive, Nursery-Age, and Growing Pig Diseases and Methods of Making and Use Thereof	10,968,258	US	Vaxxinova US, Inc.