

# innovative service for protein production



## VHH antibody screening service (NEW !!)

The camelid has an antibody comprised only of H chain, and the variable region is called VHH antibody. The VHH antibody has high stability to temperature and pH, and low-cost production is possible with a microbe. We can screen VHH antibody gene efficiently by using the high quality VHH antibody gene library and the cDNA display technology. The provided VHH antibody can be produced by Brevibacillus secretion system at high productivity. We perform one-stop service of production of VHH antibody protein from the acquisition of the genetic information.



## Affinity Resin for Antibody Purification

We developed alkaline-resistant protein A, protein G, protein L (supported by NEDO). These ligand proteins are produced by Brevibacillus as a host. Because of high productivity of Brevibacillus expression system, we can produce these ligands with a low cost. And we also developed affinity resins immobilized these ligands. You can use these resin for antibody purification with low-cost.



## Custom Service of Protein Production

There are various kinds of recombinant protein expression system, but have both good points and bad points each. The production of necessary protein is difficult with one the expression system. We have some kinds of protein expression system and can choose expression system suitable for the request of the customer. We can perform the total consulting about protein production from the design of the construct to expression platform. Please refer willingly.

### <E.coli>

Generally, it is expression system used widely.  
Low-cost production is expected, but may form an inclusion body.

### <Brevibacillus >

It is a host with excellent secretion expression.(~ 2 g/L)  
It is easy to make a right tertiary structure.  
Because there is low activity of extracellular protease,  
the degradation of the purpose protein does not happen.

### <cell-free system >

It can make even toxic proteins for a cell growth.  
It can use a PCR product as a template