

Ovoproducts (Overview)

Neova Technologies produces a line of specialty proteins - Ovoproducts. These naturally occurring egg-white proteins include avidin, ovalbumin, ovotransferrin, and ovomucoid.



Neova Technologies produces a line of specialty proteins - Ovoproducts. These naturally occurring egg-white proteins include avidin, ovalbumin, ovotransferrin, and ovomucoid. In the hen egg, they play many important roles, including:

- preventing bacterial growth through inhibition of bacterial proteases;
- binding metal ions and vitamins; and
- acting as a nutrient source for the developing chicken embryo.

APPLICATIONS

Neova's specialty proteins can be used in numerous applications including immunodiagnosics, protein purification and cell biology/cell culture. These specialty proteins are of extremely high purity and can be customized to meet the end user's specific needs.

Immunodiagnosics

Avidin is a glycoprotein with a strong affinity for binding biotin (vitamin H). This unique characteristic has given rise to biotin-avidin technology in applications including affinity chromatography, immunohistochemistry (using biotinylated probes), immunoassays and diagnostics.

Cell Biology / Cell Culture

Since ovalbumin is very similar in structure to Bovine Serum Albumin (BSA), it may be used as a substitute in many applications.

Ovotransferrin is very similar to both human and bovine derived transferrins, including lactoferrin, and can serve as a substitute in most instances. Transferrins have been identified as a required media ingredient for the maturation of cells as they play a key role in providing iron for cell growth. They also detoxify the media by binding contaminating metal ions.

Ovomucoid is a natural trypsin inhibitor, making it an excellent replacement for serum trypsin inhibitor in tissue culture research.

Protein Purification / Chemistry

Both avidin and ovotransferrin are available in high purity, which makes them appropriate in the production of polyclonal antibodies. Avidin can also be used in standards and models in molecular weight determination, while ovotransferrin can be used in structural elucidation studies.

Being a natural inhibitor of trypsin, purified ovomucoid can be used as a ligand in affinity purification of porcine and bovine trypsin following immobilization onto a suitable matrix.

BENEFITS / ADVANTAGES

As one of the largest manufacturers and suppliers worldwide of egg white proteins, Neova Technologies' advanced extraction and purification processes yield products that are consistently chosen over other competitive products. All extraction and refining is done under cGMP guidelines for active pharmaceutical ingredients (API).

A key benefit associated with using Neova ovoproducts lies in the full range of services, including both technical and applications support that Neova provides. Neova works with its customers to meet their unique product specifications.

An important advantage to using Neova ovoproducts is the elimination of the risk of disease associated with bovine and human derived plasma proteins.

Preparations ¹	Purity	Application Area		
		Immunodiagnosics	Cell Culture	Protein Chemistry
Avidin	>98%	✓		✓
AffAvidin ²	>98%	✓		✓
Ovalbumin 90	>90%		✓	
Ovalbumin 98	>98%		✓	✓
Ovotransferrin	>95%		✓	✓
Ovomucoid	>90%		✓	✓

¹ Sourced from hen egg white

² Neutral pH avidin