

Striking gold every day.

Antibodies labelled with gold provide a reliable and standardized tool for localizing proteins within or on the surface of cells. The antibodies bound are easily detected in transmission electron microscopic (TEM) images due to the high level of contrast provided by the gold particles.

The acquisition of such immunogold images with high quality is dependent on careful preparation of the specimen, which is a handicraft involving considerable skill. By choosing Vironova as your supplier of immunogold images, you are assured of obtaining the necessary expertise, based on our extensive experience with numerous immunogold-labelling techniques employed to address a wide range of biomedical and immunological research problems.

TEM immunogold services

Preparation of specimens for TEM immunogold analysis

Numerous techniques for immunogold-labelling, designed for different speciality areas, are now available. Vironova exerts considerable effort to ensure that the optimal embedding technique(s) for solving your particular research problem is employed.

The pre-embedding technique is useful for determining the localization of a specific antigen(s) at the surface of tissues, cells, bacteria or viruses.

Post-embedding is useful in connection with determination of the intracellular localization of specific antigen(s) in sectioned specimens.

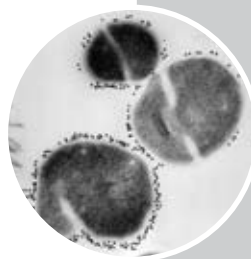
Customized techniques:

- Embedding at low temperature (Lowicryl, K1 1M, HM23, LR Gold resins)
- Cryo-immunosection –the Tokuyasu procedure
- Freezing under high pressure – freeze-substitution

Immunogold imaging by TEM

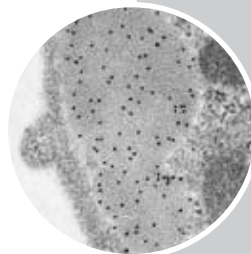
Vironova's application of digital technology to the analysis of images obtained by TEM offers unique and attractive advantages over conventional analogue approaches, i.e.,

- Enhanced capacity for storing and documenting images
- Rapid image acquisition with minimization of error



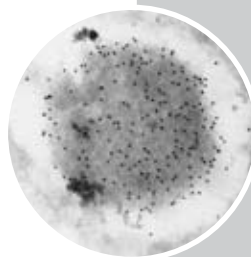
Pre-embedding

iEM of an antigen localized on the plasma membrane of bacteria



Post-embedding

iEM of the PCB-binding protein in the lung



Customized techniques

Cryo iEM of the human PLP-binding protein in the parathyroid gland (employing the Tokuyasu procedure)

Regardless of your needs, whether these involve the production of immunogold images for use in cell biological research, scientific publications or drug development, Vironova is dedicated to providing high quality digital images designed to fulfil your requirements. And at a competitive price!