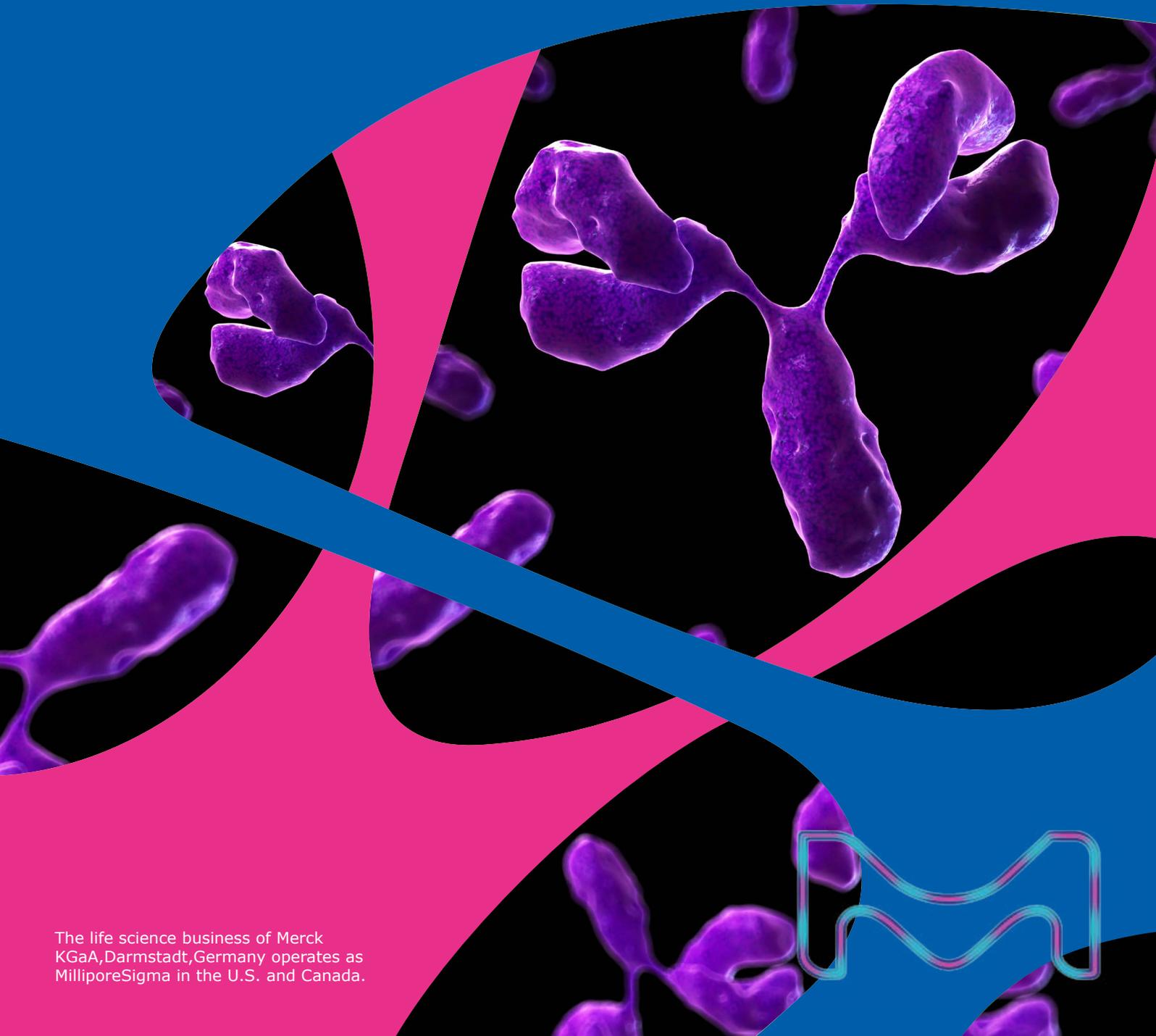


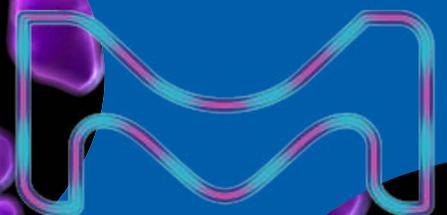
MERCK

Complete solutions FOR Lateral Flow Assay Development

**Your Partner from
Concept to Clinic**

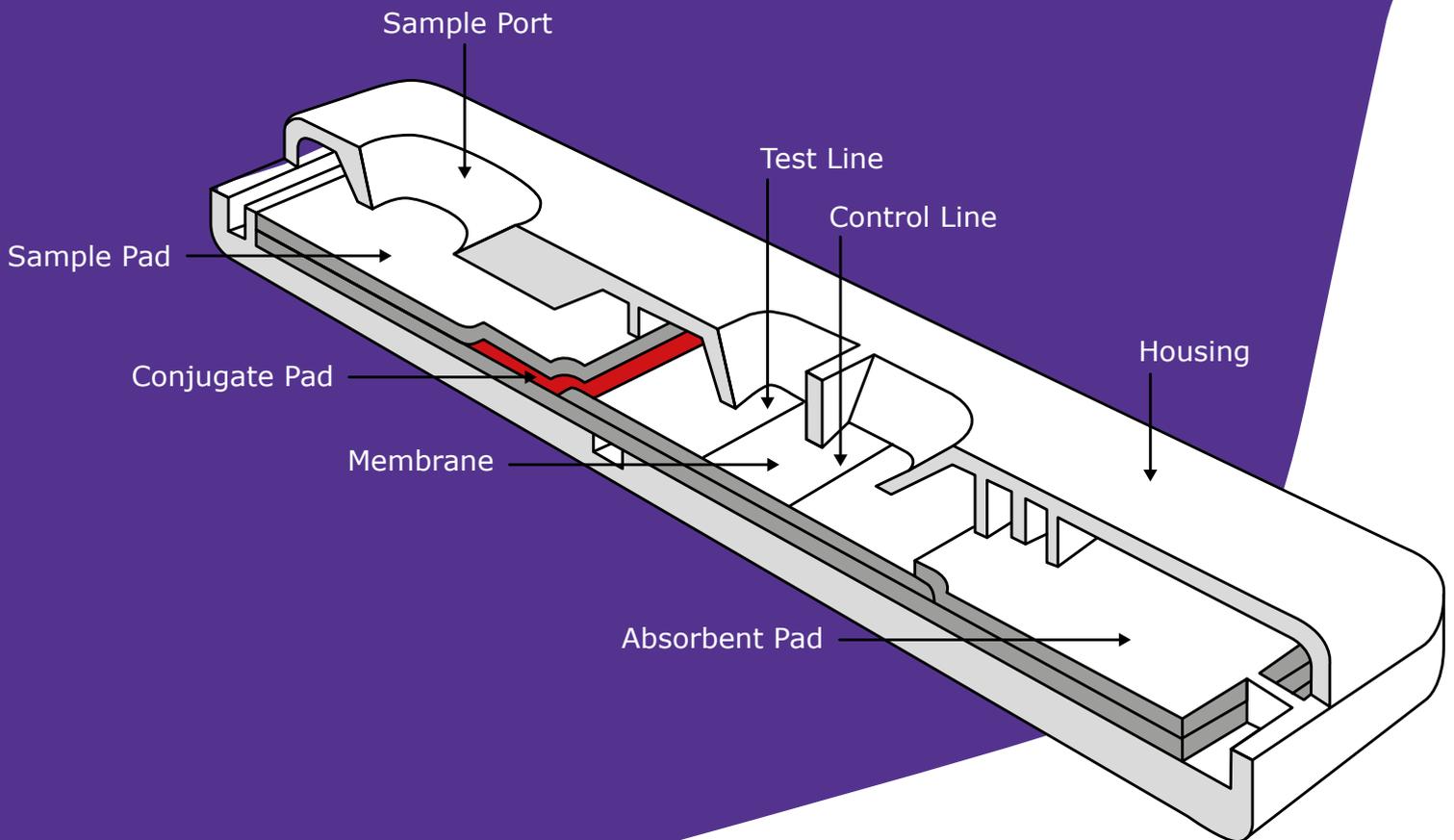


The life science business of Merck
KGaA, Darmstadt, Germany operates as
MilliporeSigma in the U.S. and Canada.



Complete solutions for Lateral Flow Assay Development

Your Partner from Concept to Clinic



1 Antibodies and Proteins

- Catalog and Custom Production
- Antibody Development and Production Reagents

2 Detection Technologies

- Estapor® Dyed, Fluorescent, and Paramagnetic Microspheres
- Gold Chloride
- Conjugation Reagents

3 Membranes and Pads

- Hi-Flow™ Plus Membranes
- SureWick® Conjugate, Sample, and Absorbent Pads

4 Quality Ancillary Materials

- Blocking Agents
- Detergents/Surfactants/Wetting Agents
- Buffers
- Stabilizers

Simplify assay development and Manufacture with a partner who understands the IVD Market

Accelerate time to market with fit-for-use products from Merck offering the quality, consistency, and documentation necessary for every step of your IVD development and manufacturing needs.

Hi-Flow™ Plus Membranes for Speed and Consistency

- 5 flow ranges to suit any assay sensitivity
- Consistent performance speeds assay designs and simplifies troubleshooting
- Available as membrane cards to simplify your manufacturing design process and production

SureWick® Pad Materials for Use as Sample, Absorbent, and Conjugate Pads

- Glass fiber conjugate pads have low extractables and excellent consistency
- 100% pure cellulose fiber sample and absorbent pads have no binders or glues to interfere with assay performance



Estapor® Microspheres for Consistent and Uniform Performance

- Over 100 available configurations to suit size and coupling requirements
- Available in dyed, paramagnetic, and fluorescent
- Intercalated dye leaves surface properties unchanged



Single Source Provider of Quality Ancillary Reagents

- Buffers
 - Tris, HEPES, Bicarbonate, Phosphate, Borate, Glycine
- Detergents/Surfactants/Wetting Agents
 - SDS, Tween®, Sodium Deoxycholate, CHAPS, PVA, PEG, PVP
- Stabilizers
 - Trehalose, Sucrose
- Colloidal Gold synthesis
 - Gold Chloride, Sodium Citrate, Hydroquinone
- Milli-Q® Lab water



Industry Leader for Antibody Production and Supply

- Over 80,000 antibodies targeting a wide variety of clinical conditions, including Cancer, Infectious Disease, Cardiovascular, Neurological, and Metabolic
- Secondary antibodies specific for commonly used species and antibody subtypes, with a range of conjugation options
- Manufacturer of monoclonal antibodies to all human immunoglobulin subtypes, including Anti-Human IgM

High Quality Controls and Calibrators

- Human monoclonal infectious disease antibodies. An alternative to human plasma controls
 - Human lymphocyte-derived cell lines are truly representative of a human immune response
 - Eliminate biohazard risk and inconsistency of disease-positive human plasma
 - Consistent performance and robust supply chain to simplify assay development

Industry Leading Blocking Agents

- Wide range of BSA, including Probumin[®] BSA for IVD applications
- Active, passive, and isotype-specific blocking agents produced for IVD manufacturers
- Alternative blockers
 - Casein, Gelatin, Sera from non-bovine sources, Purified IgG

Antibody and Protein Development and Production Reagents

- Immunization
 - KLH and BSA carrier proteins, Freund's adjuvant
- Routine cell culture
 - Media, sera, supplements, additives, and antibiotics
- Hybridoma support reagents
 - Hybri-Max™ specialist media, supplements, and reagents
- Purification resins
 - Protein A, including ProSep®-vA, Protein G and L, Ammonium Sulfate, size exclusion, and ion exchange
- Conjugation reagents
 - EDC, Glutaraldehyde, and heterobifunctional reagents
- Detection enzyme conjugates and substrates



Quality solutions for Lateral Flow Assay Development and Manufacture

Your Partner from Concept to Clinic

Partner with Merck early in development to source raw materials ensuring a smooth and efficient transfer from R&D through commercialization.

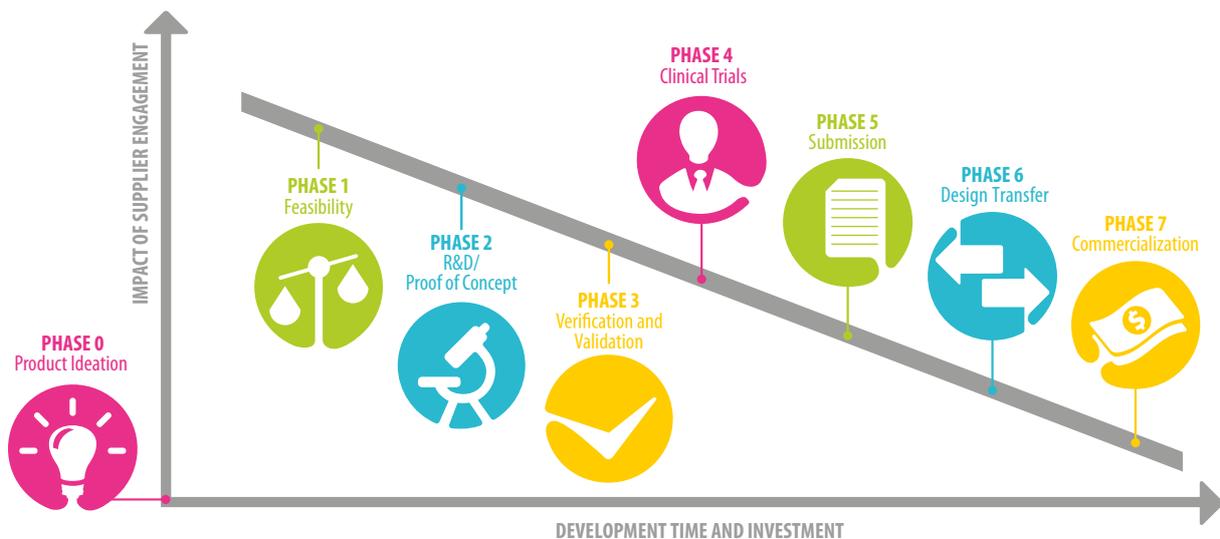
We offer:

- Product selection assistance
- Risk mitigation support
- Clear quality and supply chain guidelines
- Reliable and transparent global supply chain
- Proactive forecasting
- Superior documentation
- Regulatory insight

In collaboration with our customers, we have created the Diagnostics Elite grade products, a fit-for-use portfolio of raw materials specifically designed for the IVD market. These products include supply chain and quality controls designed to:

- Reduce lot-to-lot variability
- Eliminate unforeseen changes
- Provide complete quality documentation

Impact of Early Supplier Involvement



Bulk and contract raw material Manufacturing for Lateral Flow Assay Developers

Your Partner from Concept to Clinic

Merck offers years of experience in critical and non-critical raw material manufacturing, supporting a full range of custom and contract manufacturing services for the diagnostic manufacturer.

Let us partner with you from the development of the initial concept, through scale up and final manufacturing; ensuring that you have quality products, at the optimal scale, at the right time, to aid your rapid commercialization.

concept —————> clinic

Antibodies & Protein - Production & Conjugation

- Antibody and protein development
- Production and purification of proteins and antibodies
- Conjugation to a variety of dyes and labels

Cell Line Optimization and Storage

- Serum-free adaptation for improved yields and ease of purification
- cGMP cell banking and inventory management

Bulk & Custom Formulation

- Custom packaging & labeling
 - Detergents, buffers, blockers, detection and other ancillary reagents
- Formulation of bulk reagents
- Functional and purity assays to your specifications

Lateral Flow Membrane

- Hi-Flow™ Plus master rolls, slit to order

Estapor® Microspheres

- Custom development
 - Size, density, color, ferrite content
- Bulk reservations





For further information please find additional related brochures on our website:

www.sigmaaldrich.com/lateral-flow-immunoassays

