

1.1 Global Header (Amazon Style)

- **Top Bar Container:**
 - **Left:** Logo (PBL Assay Science).
 - **Center:** Search Bar (Prominent, "Amazon style").
 - **Right:** "Cart" icon and "Contact Us" link/icon. "Login/Signup" account icon"
- **Navigation Bar (Row Below Top Bar):**
 - Contains **only 4** items: Products, Services, Resources, Contact Us.
 - **Note:** All other items (History, Careers, etc.) are removed from here.

1.2 Global Floating CTA

- **Element:** A standalone button labeled "**REQUEST A QUOTE**".
[<https://www.pblassaysci.com/speak-to-a-scientist>]
- **Placement:** Must appear at the top of every Product and Service page (replacing the old "microscope" box).

1.3 Global Footer (Mega Footer)

- **Content in left column:** Contains the following items previously found in the "Hamburger Menu""
 - PBL Logo
 - Shipping
 - History
 - PBL Team
 - Distributors
 - Values
 - Privacy
 - Terms
 - Events
 - Careers
 - Company Values
- **Content in right column:**
 - LinkedIn clickable Icon
 - Address (from existing site)
 - Phone numbers (from existing site)
- **Resources:** "Blog" link is located here as well.

Home Page

- **Hero Section:**
 - **Background:** Image of "Ribbon" (Image #1).
 - **Headline (Top Left):** "Fit-for-purpose assay development, customization and execution."

- **CTAs (Bottom of Hero):** Two buttons side-by-side: "Products" and "Services".
- **Section 2:**
 - **Headline:** "Tailored Services that Meet Your Needs".
 - **Image:** Scientist in Lab (Image #2).
 - **Copy:** "At PBL our 3 decades of assay development experience mean we deeply understand the technical challenges you face. Our Bioanalytical Services solutions combine subject matter expertise with high performance standards, short timelines and cost-effective pricing."
 - **Stats Bar:** Horizontal layout showing "X days to study start," "X% client retention rate," "X projects completed" (Real numbers to be provided later).
 - **CTA:** Button "Speak to a Scientist". [goes to a contact submission form]
- **Section 3:**
 - **Headline:** "Products that Won't Let You Down".
 - **Image:** PBL Assay Box (Image #3).
 - **Copy:** "PBL products are developed with real-world biology in mind. We support you with assays and reagents, i.e., proteins and antibodies, that are high quality, consistent and reliable, three reasons why our products are frequently cited and validated. Need help? We also provide detailed technical information and product support, from our scientists to yours."
 - **"Featured Products" (List Icons):** 1. Optimized for Variability, 2. High Sensitivity, 3. Accurate Quantification, 4. Full-spec Assay Range and LLOQ
 - **CTA:** Button ["Go to Products"] link to Products page [<https://www.pblastassaysci.com/index.php/products>]
- **Section 4: Headline: "Let Us Do It For You"**
 - **Image #4**
 - **Headline:** Bioanalytical Testing
 - **Copy :** "At PBL we expedite your R&D work by adhering to fit-for-purpose guidelines and generating only the data you need. Our team is an extension of yours. Our assays are validated under ICH M10 guidelines and support discovery, pre-clinical studies, and exploratory clinical trial endpoints."
 - **Image #5**
 - **Headline:** Assay Development
 - **Copy:** "PBL develops assays for research use or to a standard that will support GLP validation - the choice is yours. We support cell-based assay development, immunoassay development and assay optimization. Wherever you are in the research journey, our team is here to work alongside you."
- **Section 5: Headline: "Quality Products You Won't Find Anywhere Else"**
 - **Image #6**

- Copy under image: “Total Human IL-15 ELISA Kit”
<https://www.pblastassaysci.com/index.php/assay-kits/human-il-15-elisa-kit-high-sensitivity-serum-plasma-tcm-41702>
 - **Image #7**
 - Copy under image: **Human IFN Alpha ELISA Kits:**
<https://www.pblastassaysci.com/assay-kits/ELISAs/human-interferon-ELISAs/human-ifn-alpha-ELISAs>
 - **Image #8**
 - Copy under image: **Mouse IFN-Beta ELISAs:**
<https://www.pblastassaysci.com/assay-kits/elisas/mouse-interferon-elisas/mouse-ifn-beta-elisas>
 - **Image #9**
 - **Human IFN-Alpha 2a (Alpha A) Protein:**
<https://www.pblastassaysci.com/proteins/human-ifn-alpha-alpha-2a-11100>
 - **Image #10**
 - **Human Type I IFN Neutralizing Antibody Mixture:**
<https://www.pblastassaysci.com/index.php/antibodies/human-type-1-ifn-neutralizing-antibody-mixture-39000>
 - **Image #11**
 - **Human Interleukin 15 / IL-15Ra Heterodimer:**
<https://www.pblastassaysci.com/proteins/human-interleukin-15-il-15ra-heterodimer-human-cell-expressed-11702>
 - **Section 5: “Don’t Take Our Word For It”**
 - **Content:** Slider containing quotes below
 - “There is no match for the support you provide. The PBL team is always very clear, thorough, and prompt with its responses. We’ve greatly benefitted from the depth of scientific knowledge and project design expertise that PBL brings to the table.” -Senior Scientist & Program Lead, Large U.S. Pharma
 - “I appreciate your care in reliably producing high-quality data, and I’m always grateful for the work you invest into our studies.” -Director of Biology, Midsize U.S. Biotech
 - “The moment we hear that you’ve qualified a difficult assay, we breathe a sigh of relief because we know our samples are in good hands.” -Senior Scientist & Program Lead, Large U.S. Pharma

- “PBL is superfast and always very helpful and knowledgeable.” -Postdoctoral Fellow, Large U.S. University
- “I appreciate your team’s support, expertise, and thoughtfulness. It’s been a delight working together, and I look forward to future collaborations.” -Research Scientist, Large U.S. Pharma
- “Thank you, PBL, for producing fantastic data, your quick turnaround time, and your responsiveness to my needs.” -Senior Scientist, Small U.S. Biotech
- “I appreciate PBL’s strong support and flexibility and look forward to your continued support on additional high-priority projects.” -Senior Director, Large U.S. Pharma
- “Having the opportunity to work with you has been a real pleasure. We very much enjoy working with the PBL team. Your project support and flexibility are absolutely appreciated.” -Associate Director, Small U.S. Biotech

Products Landing Page (delete “request a quote” from nav dropdown) Also delete the microscope box and replace with the Floating CTA "REQUEST A QUOTE".)

- **Header Section:**
 - **Image:** Header Image #13.
 - **Headline under image 13:** "Products That Won't Let You Down".
 - **Copy:** "We offer a range of high-quality interferon and interleukin immunoassay kits, cytokines and interferons, and monoclonal and polyclonal antibodies for life science researchers. Our products provide consistent performance with reliable and reproducible results".
 - **Floating CTA:** "REQUEST A QUOTE" button.
- **Product Categories Grid (3 Main Boxes):**
 - **Assay Kits:** Image #15. Click leads to Sub-page.
 - **Proteins:** Image #16. Click leads to Sub-page.
 - **Antibodies:** Image #14. Click opens distinct view (see below).
- **Antibodies Interaction (In-Page or Sub-page):**

- **Visual:** Shows Image #14 and two clickable boxes: "Monoclonal Antibodies" and "Polyclonal Antibodies".
- **Headline and copy under image 14: headline:** "PBL Offers Monoclonal and Polyclonal Antibodies From Multiple Mammalian Species". **Body copy:** "Monoclonal and polyclonal antibodies are often interchangeable; however in some applications, one or the other antibody will give a better result.
- Monoclonal antibodies (MAbs) are monospecific antibodies that are the same because they are made by identical immune cells that are all clones of a unique parent cell. MAbs have monovalent affinity, in that they bind to the same epitope and offer high specificity in applications such as ELISA, flow cytometry or epitope mapping where specific binding is desirable.
-
- PBL's MAbs are derived against a range of interferons from various mammalian species. They deliver superior *product stability* and *high specificity* while providing *reliable* and *reproducible results*."
 - 1. MONOCLONAL ANTIBODIES (Box with subclicks below)
 - Anti-Human IFN MAbs (clickable link)
 - Anti-Mouse IFN MAbs (clickable link)
 - Anti-Porcine IFN MAbs (clickable link)
 - Labeled Anti-IFN MAbs (Human, Mouse)(ADD THIS ONE to menu)
 - POLYCLONAL ANTIBODIES (clickable link) (Box with subclicks below)
 - Anti-Human IFN PAbs (clickable link)
 - Anti-Mouse IFN PAbs (clickable link)
 - Anti-Rat IFN PAbs (clickable link)

(NOTE: EVERYTHING IN THE CATALOG HEIRARCHY IN THE CLICKABLE LINKS IN THE POLYCLONAL AND MONOCLONAL ANTIBODIES SECTIONS REMAINS THE SAME. DO WE STILL NEED TO MAP THE REST?)

- **Proteins Interaction (In-Page or Sub-page):**
 - **Visual:** Shows Image #16 and 3 clickable boxes: WITH THIS COPY UNDER IMAGE "With over 30 years of experience developing and manufacturing recombinant proteins for life science research, our manufacturing and quality standards ensure that our proteins exhibit lot-to-lot consistency, as well as high levels of bioactivity, high purity, and low endotoxin levels."
 -
 - Many of our proteins are sold as units of activity per vial instead of in units of mass per vial (μ g or mg). Each new lot of protein is tested internally using the same bioassay to provide a valid activity comparison between lots. (ED50 is the amount of protein required to elicit a 50% maximum response in the bioassay.) Providing our proteins by activity instead of mass ensures that your results are biologically relevant."

- CYTOKINE and GROWTH FACTORS (keep all words and hierarchy from old site, the same from here on)
 - E.coli & CHO Expressed Cytokine & Growth Factor
 - Human Cell-Expressed Cytokines
- INTERFERON DECOY RECEPTOR (keep all words and hierarchy from old site, the same from here on)
 - Mouse Interferon Alpha All-Subtype Neutralizing Viral Protein
- INTERFERON (add Rat IFN so there are 4 sub lines)
 - Human IFN Proteins (clickable link and the rest remains the same)
 - Rat IFN Proteins (clickable link and the rest remains the same)
 - Mouse IFN Proteins (clickable link and the rest remains the same)
 - Mammalian IFN Proteins (Non-Human, Non-Mouse) (clickable link and the rest remains the same)

- **Assay Kits Interaction (In-Page or Sub-page):**
 - **Visual:** Shows Image #15 and 3 clickable boxes: WITH THIS HEADLINE COPY UNDER IMAGE “High-performance IFN & Cytokine ELISA Kits are Characterized to Provide You with Reliability and Accuracy”
 - CELL-BASED ASSAYS
 - iLite Human Type I IFN Responsive Cells for bioactivity measurement.
 - INTERFERON (IFN) ELISAs
 - Human Interferon ELISAs
 - Mouse Interferon ELISAs
 - Non-Human Interferon ELISAs
 - INTERLEUKIN (IL) ELISAs
 - Human IL-15 ELISA
 - Human IL-22 ELISA

Services Landing Page (delete from Nav bar dropdown “discuss your project”)

- **Header Section:**
 - **Image:** Add Header Image #17. Keep “ASSAY SERVICES” TITLE ON IMAGE
 - **Headline:** "Let Us Do It For You".
 - **Floating CTA:** "REQUEST A QUOTE" button.

- Delete “Explore the range of services the PBL Team can provide — our team will work with you at every step of your project.
- **Services Grid (5 Boxes (ADDING A NEW BOX)):**
 - Note: Remove "Discuss Your Project" form from this menu.
 - **Assay Development.** (keep copy inside box)
 - **Biomarker Sample Analysis** (Renamed from Sample Testing). (keep copy inside box)
 - **Cell-Based Services.** (keep copy inside box)
 - **Custom Production.** (keep copy inside box)
 - **Antibody Characterization Service** (**New box and New standalone page**).
Each box contains a "Find Out More" link/button, and keep the destinations
- **VIDEO (keep video on current site, remove the copy under video)**
 - **KEEP THE CTA button only [Download Our Services Brochure]** (with existing link)
- **DELETE LIGHT BLUE BOX AND ALL CONTENT “PBL Assay Science: Advancing Research Every Day”**
- **Why Choose PBL? Section:**
 - **Headline:** "Why Choose PBL?" (Replaces 'What you can expect when work with us') .
 - **Layout:** 4 Columns/New Icons (Replaces Hexagon Icons with NEW icons from conner).
 - **Cost-Effective.**
 - **Shorter Timelines.**
 - **Depth of Understanding.**
 - **High Quality.**
- **Bottom CTA:**
 - **Action:** Single button "Speak to a Scientist" (Replaces the "Let's Discuss Your Project" form- remove the entire blue box except the CTA to Talk to a Scientist).
- **DELETE:** “beyond assay services”...

Service Sub-Pages

5.1 Biomarker Sample Analysis Page (REPLACES “SAMPLE TESTING”- NAME CHANGE)

- **Interactive Nav Bar Dropdown List:** 3(Clickable Dropdown Items from Nav Bar):
 - SIMOA Assay Services (delete ‘contact our service scientist and testimonial blue square, keep the rest)
 - SMC Assay Services (delete “contact our service scientist”, “*To enable scientific community to overcome challenges through high-quality services*” and testimonial blue square, keep the rest)
 - Multiplex ELISA Assay Services (delete ‘contact our service scientist’, “*Reliable Results. Deeper Insights. Better Decision.*” and testimonial blue square, keep the rest)

5.1 Biomarker Sample Analysis Main Page (Keep all copy on this page verbatim from old site, remove CTA top and replace with

- **CTA:** "Talk to a Scientist". [<https://www.pblassaysci.com/speak-to-a-scientist>]

5.2 Cell-Based Services Page

- **Header: Image #19.**
- **Keep header copy** "Cell-based assay tools are key to understanding cellular mechanisms in a biologically relevant context. PBL offers a targeted portfolio of cell-based assay services to provide you with the most relevant information and facilitate the advancement of your research."

Whatever your cell-based study needs, PBL will work with you to determine the most suitable assay program to meet your goals. PBL's services team is a trusted partner of midsize and major biotech and pharma companies worldwide."

- **List:** Keep all copy with 4 Headlines :
 - Cytopathic Effect Inhibition Assay Service (CPE).
 - Proliferation & Anti-Proliferation Assay Services.
 - Cytokine Secretion Detection Services.
 - Neutralizing Antibody Assay Service.
- **Bottom CTA:** DELETE the submission form box / replace with button ["Talk to a Scientist"]. [<https://www.pblassaysci.com/speak-to-a-scientist>]

5.3 Antibody Characterization Service (New Page- content moves from "Custom production" page to a new page. Keep copy the same from old)

- **Header:** Image #21. (new antibody image-CMM)
- **Content:**
 - **Headline/Intro:** "[Antibody Characterization Service](#)".
 - **Copy:**
 - Affinity of protein-protein interactions; Antibody-antigen specificity and affinity: Real-time BLI-based (Bio-layer Interferometry) biophysical characterization of polyclonal and monoclonal antibody affinities (K_d) for antigen
 - Association and dissociation rates of protein-protein interactions: Quantification of K_{on} and K_{off} rates for many antibody/antigen pairs underlying their dissociation constants
 - Epitope binning based upon antibody binding to non-overlapping epitopes

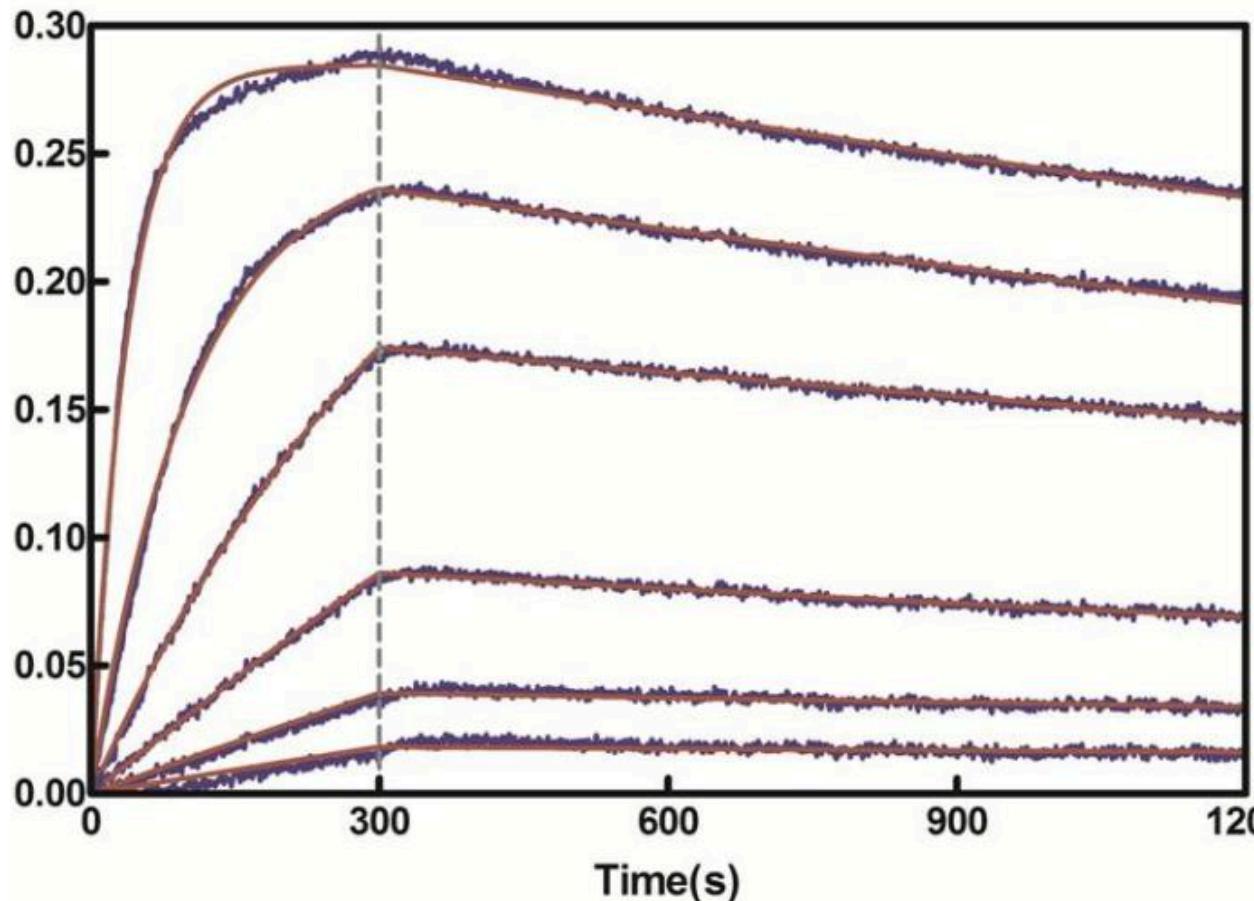
- Antibody screening to reveal appropriate biophysical profiles for specific applications

With a wealth of knowledge on immunological interactions, we offer protein biophysical characterization services which can determine the kinetic characterization of protein-protein interactions. PBL offers biophysical characterization of antibody affinity for a ligand or the measurement of antigen:antibody K_{on}/K_{off} rates. To accelerate assay development, we also determine which antibodies bind to antigens in a sandwich format. Binning—determination of antibodies which bind to non-overlapping epitopes—is performed using multiple hybridoma clones.

The graph shows the association and dissociation of IFN to a surface-immobilized antibody as determined by real time Biolayer Interferometry (BLI) using varying concentrations of IFN. The raw data is shown in blue and the model response in red. IFN Binding to and Dissociation from a Surface-Immobilized Monoclonal Antibody Evaluated by Bio-Layer Interferometry (BLI).



- **Visual Data:** Pull the Graph from old website Custom Production Services page showing "Association and dissociation of IFN..." (



5.4 Custom Production

- **Header:** Image #20. (new antibody image)
- **Header Copy under image:** PBL's reagent development services offer customized production of cytokines, interferons, antibodies, and other proteins.
- **Interactive List:** 4 Clickable Headlines (Purple):
 - Recombinant protein production and purification (bacterial & mammalian)
 - Cytokine and antibody production and characterization
 - Hybridoma, polyclonal antibody, and cell line development
 - Protein and antibody labeling and biophysical characterization

That's all on this page

5.4 Assay Development

- **Header:** Image #18.(new scientist in lab)
- Delete this paragraph:"The PBL team has extensive experience and depth of knowledge in cytokine and interferon-related research, as well as in immunological assay development. With our team-based approach and attention to detail, we provide uncompromising quality from a company you can trust. We strive to communicate effectively with our clients by keeping you informed throughout your project and by facilitating direct and open communication channels with our scientific team. As we can custom tailor our service"
- Delete: "**Custom Assay Design & Development**
- Delete "PBL assay development services can be tailored to your specific needs. Assays are developed for research use or to a standard which supports subsequent GLP validation.
- Delete "You can be confident that PBL will provide a viable solution that will maximize the data from your samples during a development project. We will work alongside you to define essential steps, reagents required, and identify potential issues before they occur. From proof of principle to technology transfer, our experience will ensure we deliver a robust and sensitive assay solution for your specific application needs."
- "MAKE THE 3 REMAINING SECTIONS INTO BOXES:
 - **Box 1: Cell-Based Assay Development**

Cell-based assay development services offered, but not limited to, include:

- Custom cytopathic effect, anti-proliferative, and growth promotion assays
- Development of reporter gene systems or identification of cell lines to monitor activity of the compound of interest
- Neutralization of bioactivity by antibodies which is relevant to identification of bioactive monoclonal antibodies (MAbs) and monitoring of immunogenicity

- **Box 2: "Immunoassay Development"**

Custom immunoassays and ELISAs to support:

- Pharmacokinetic and pharmacodynamic studies
- Toxicity and immunogenicity studies
- Direct, sandwich, or competitive ELISA assay development

- **Box 3 "Assay Optimization Service"**
- Specificity and cross-reactivity assessment
- Analytic and dynamic range optimization
- Reduction of matrix effects (serum, plasma, tissue culture media)
- Reduction of inter- and intra-assay variability
- Standard calibration

- Assay stability assessment
 - Protocol optimization
-
- The following sentence runs across the bottom of the boxes:
 - “Multiple developed assays have been transferred to regulated environments.”

Resources Page

- **Resources Page**
 - **Header:** Image #23.
 - Keep the 3 columns the same with **3 NEW images (need from conner)**- all destinations of links the same
 - **All Tehchnical Resources Filter System:** Filter by Topic (Keep the bottom filter, but delete all of the boxes with preview articles).

Contact Us (new Page: This is the old “Customer Service: Customer support “ page, with a new name and added to the Nav Bar rather than inside the hamburger menu)

- Header Image #23
- Keep everything on this page the same, except delete the Technical Service box. Make a new box that is called “Distributors” and only have this clickable link in the box [<https://www.plassaysci.com/distributors>]