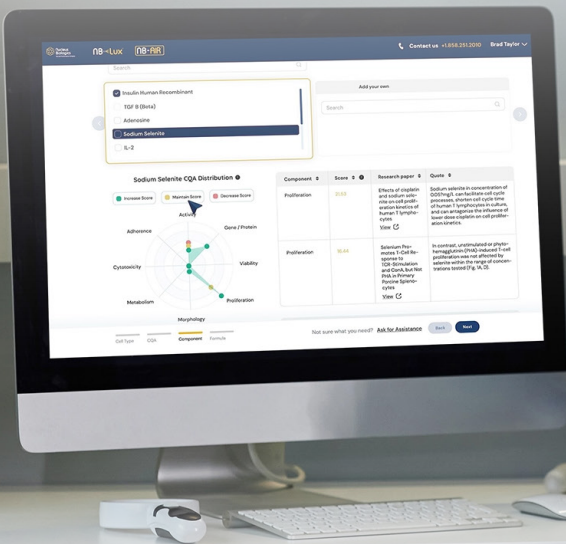


NB-AIR™ Media Designer Tool

Cloud-Based AI Platform for Media Configuration



NB-AIR™ Media Designer Tool

Design Optimized Formulations in Minutes

NB-AIR is an AI-enabled online platform that helps users design custom cell culture media. Utilizing artificial intelligence and machine learning, NB-AIR canvases thousands of peer-reviewed publications and generates data on how different components can affect selected critical quality attributes (CQAs). After performing its meta analysis, NB-AIR recommends formulations that address your needs. NB-AIR can expedite the formulation process and allow for accelerated testing of multiple pilot batches.

Take control of your media formulations. Create the best media for your cell type.

Cloud Based and Easy to Use

Online AI-based platform with an intuitive interface to easily and instantly facilitate the design of your optimized formulation.

Simplify Formulation Process

Your personal formulation scientist. Leveraging a novel neural network, NB-AIR simplifies the complex process of media design.

Accelerate Formulation Design

In mere minutes, canvas thousands of publications to identify component-level information to create or refine formulations.

Enhance Cell Performance

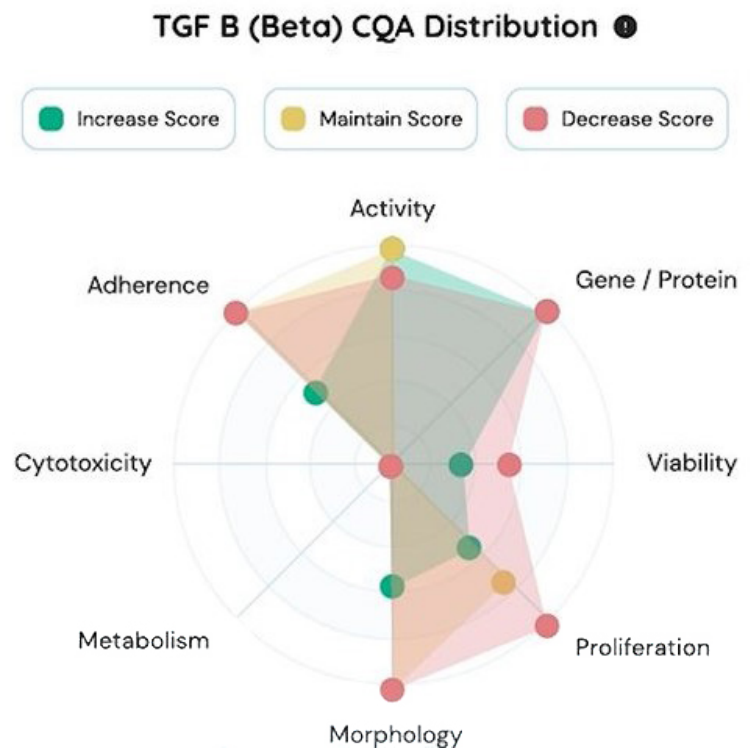
Tailor media to your cell type and CQAs to accentuate beneficial characteristics that promote desired outcomes.

Test and Iterate Your Formula

Receive multiple custom formulation recommendations based on your cell type and CQAs and quickly test your media.

Own Your Media Formulation

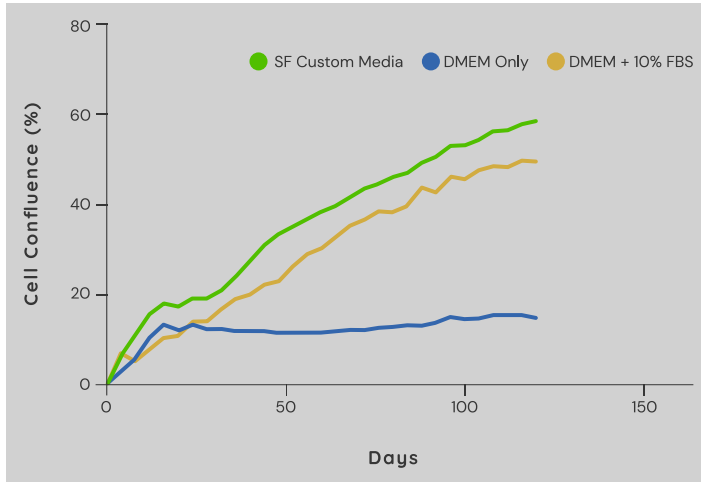
Designed by you, you own the IP, which can be a benefit during downstream development, regulatory compliance and scalability.



Make Custom Media Your Competitive Advantage

Highly-Specialized Formulations Help Achieve Optimal Performance

Cell culture media is more than just another raw material. Changing just one component in your media can significantly enhance cell function — improve yield, transduction efficiency, cytotoxicity. An optimized cell culture medium can maximize cell performance, bring consistency and reproducibility of results, and drive program success.



Growth kinetics of custom serum-free media vs. FBS-containing media.

This study demonstrates the design of a custom media to completely replace 10% FBS in a fibroblast model. The left panels show confluency at the final timepoint in DMEM + 10% FBS, DMEM only, and Serum-Free (SF) Custom Media. The line graph demonstrates confluency over the course of the entire study for each of these conditions. Serum-free custom media was able to promote proliferation even superior to the FBS-containing media.

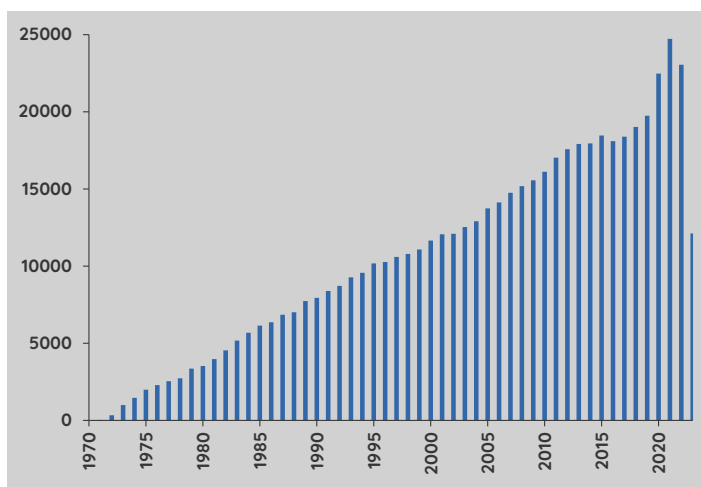
Full Transparency of Every Component

Free your process from hidden media components. Formulated specifically for your cell type and CQAs, transparency is guaranteed — know every component and its concentration.

Accelerate Media Design Research

Identify Components and Design Formulations in Minutes

NB-AIR is an automated media configuration tool that allows users to design intelligent media in just minutes. NB-AIR searches through data from hundreds of thousands of articles so you don't have to. Based on the selected cell type and CQAs, NB-AIR utilizes a machine learning algorithm that instantly canvases the latest peer-reviewed PubMed® research to identify high-value compounds, concentrations, and their effects on cell performance. After performing this meta-analysis, it recommends multiple formulations that can be customized and ordered through NB-Lux™.



Count of T-cell publications; PubMed historical information.

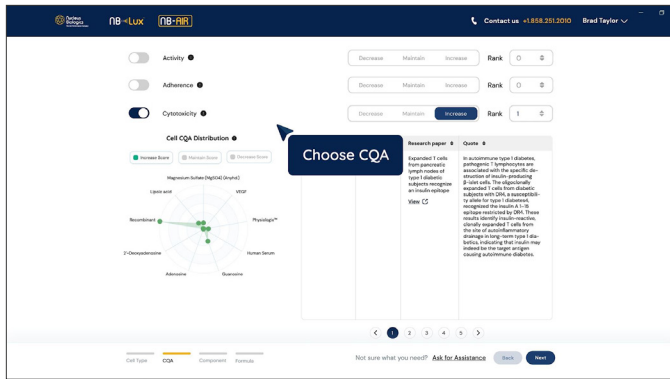
Yearly historical total T-cell publications in PubMed from 1970 to 2023 (July 2023). With 566,822 publications on T-cells alone, finding the appropriate data requires canvassing thousands of articles.

Synergistic Complete Media Solutions

NB-AIR complements our portfolio of innovative products and services to support programs from design to delivery.

- Create your custom media formulation using NB-AIR, our self-guided media design tool, or have our formulation experts design one for you.
- Customize your formula, packaging, and testing and order your media on NB-Lux, our online media configuration platform.
- Solubilize your media sustainably at point of use with Krakatoa™.

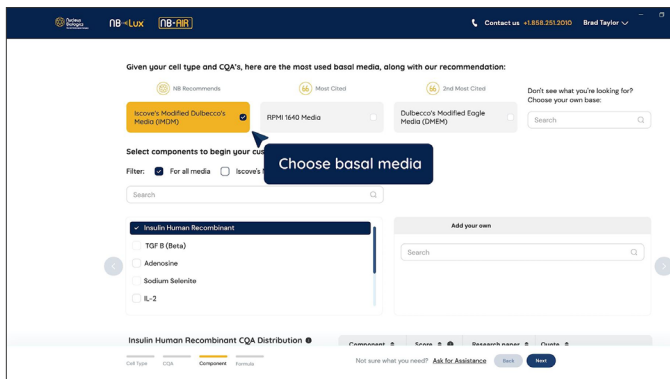
Designing Your Media Is as Easy as 1-2-3



Step 01

Pick Your Cell Type and Critical Quality Attributes (CQA)

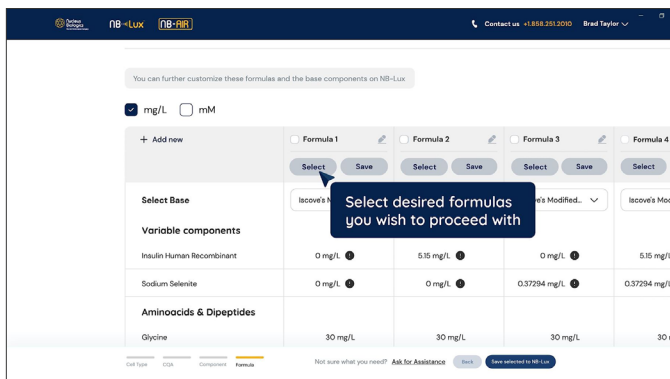
Choose your target cell type. Next, select and rank the CQAs that are most important for your experiment and choose the desired impact for each: decrease, maintain, or increase.



Step 02

Pick Media and Components Recommended for You Based on Your Selections

Based on your cell type and CQAs, select from the recommended basal media and then supplement your media with your desired components. Links to publications are displayed for your review.



Step 03

View Recommended Formulae and Save Your Favorites to NB-Lux™

NB-AIR will suggest formulations based on your choices. Select and name the formulations you wish to save. Selected formulations are stored in NB-Lux where you can further customize and order.

NB-AIR™ Media Designer Tool Ordering Information

Catalog Number	Product Name	Duration	Price
NBA-P-001	NB-AIR™ Professional License	1 year	\$5,000
NBA-A-001	NB-AIR™ Academic License	1 year	\$950

Contact Nucleus Biologics to inquire about bundle pricing for multiple licenses.

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