SentinusAI® Goes Live: Ainnocence's AI Platform Turns Sequence Data Into Discovery Decisions in Days

The AI platform for therapeutic antibody and biologics discovery is now open for subscription.

SAN FRANCISCO , CA, UNITED STATES, March 25, 2026 /EINPresswire.com/ -- The Challenge

Therapeutic antibody development still depends heavily on structural data, animal immunization, and months of iterative experimental screening. Each cycle inflates cost, delays timelines, and limits how many targets a team can pursue in parallel. For biotech and pharmaceutical organizations under pressure to move faster, this bottleneck is unsustainable.

What Is SentinusAI®?

SentinusAI® is an end-to-end AI platform developed by Ainnocence Inc. that transforms protein sequence data into actionable, decision-ready outputs across every stage of therapeutic discovery. Built on a proprietary protein foundation model trained on more than 53 million protein sequences, the platform operates from amino acid sequence alone, no 3D structures, no animal models, no prior lead compounds required. Powered by a proprietary 1-billion-parameter protein foundation model AINN-P1 and protected by 20+ PCT patents, it has supported 80+ active drug design projects with demonstrated wet lab hit rates of 10-60% all while reducing R&D costs by up to 80% compared to traditional discovery methods.

What You Get

Antibody Design and Binding Ranking: Score and rank antibody-antigen combinations at scale. Prioritize the strongest binders without burning cycles on guesswork.

Epitope Mapping: Identify binding regions across both linear and conformational epitopes for deeper mechanistic insight into antibody–antigen interactions.

Affinity Improvement: Explore in silico maturation strategies computationally. The platform proposes ~50 variants per round with hit rates reaching ~60% by the compressing months of wet-lab iteration into weeks.

Fusion Protein Engineering: Extend AI-driven sequence-based design to fusion proteins,

peptides, and multi-domain constructs beyond traditional monoclonal antibodies.

Developability & Safety: Assess solubility, stability, aggregation risk, expression efficiency, off-target toxicity, and antibody humanization, before you synthesize a single molecule.

Proven in Research

In a landmark study published in Nature Scientific Reports (2025), Ainnocence researchers used SentinusAI® to design broad neutralizing antibodies against over 1,300 SARS-CoV-2 strains. Seventy AI-designed antibodies were experimentally validated, including against Omicron variants that did not exist at the time of design, demonstrating the platform's capacity to predict and pre-empt viral evolution.

Ainnocence's AI-designed pipeline spans 76 programs across monoclonal antibodies, bispecifics/multispecifics, and ADCs targeting immune checkpoints (PD-L1, HHLA2, B7H3), cytokines/receptors (IL-13, IL-23, IL-33, TSLP, TL1A, IL-36R), tumor-associated antigens (TROP2, GPNMB, MELTF, DLK1, MUC16), growth factors (VEGF, ActRII, Myostatin), and CNS targets (CD98, Nogo-A) across autoimmune, oncology, metabolic, and CNS indications. The pipeline further includes a 29-target GPCR antibody & nanobody program spanning GLP1R, GIPR, GCGR, CNR1, CCR8, CCR5, S1PR1, CCR2, CXCR4, EDNRA, PTH1R, GNRHR, ADCYAP1R1 , ADORA2A, CCR4, SSTR2, C5AR1, APLNR, F2RL1, CXCR2, CASR, EDNRB, MC4R, CXCR1, CXCR3, CXCR5, CXCR6, GPR183, LPAR2, and F2RL3 with select candidates advancing into animal studies and all programs available for partnering.

See It in Action

Watch our platform walkthrough to see how SentinusAI® takes you from raw sequence input to ranked, optimized, developability-scored candidates in a single workflow: Watch the Demo Video

Ready to Subscribe?

SentinusAI® is now open for subscriptions. Choose the plan that fits your team and start accelerating your pipeline today: View Pricing & Subscribe

Want to Talk First?

Schedule a discovery call with the Ainnocence team. We'll walk you through the platform, answer your questions, and help you find the right fit for your workflow: Book a Meeting

Dr. Lurong Pan, PhD
Ainnocence
+1 205-249-7424

lurong.pan@ainnocence.com
Visit us on social media:
LinkedIn
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