

Perle Labs: Sovereign Intelligence Data Layer for AI

Perle Labs is designed as a sovereign intelligence data layer for AI. The project provides expert-verified, human-validated, and on-chain auditable data infrastructure for governments, enterprises, and frontier AI labs that cannot rely on opaque or untrusted data pipelines.

As AI models increasingly train on synthetic content and unknown data sources, the risk of data poisoning, model degradation, and security breaches grows. At the same time, AI systems are moving from low-risk tasks to high-stakes decision-making in healthcare, robotics, transportation, and defense. In this environment, the integrity and provenance of training and evaluation data become a critical requirement.

Perle Labs responds to this need by combining three pillars:

1. Expert-based contributions rather than anonymous crowd work
2. Full life cycle audit trails for data and human work, recorded on a chain
3. Incentive structures and reputation mechanisms that reward consistent quality over speed

Perle Labs aims to become a foundational public infrastructure layer that any serious AI system can rely on for trusted data.

1. Vision

The vision of Perle Labs is to turn verified human expertise into a verifiable, programmable, and portable asset inside AI supply chains. The project seeks to ensure that every high-stakes AI decision can be traced back to accountable human judgment.

Perle Labs pursues the following long-term goals:

- Establish a standard protocol for sovereign, expert-validated AI data
- Provide audit ready data infrastructure for regulators, governments, and critical industries
- Create an expert economy where professionals build on a chain reputation and share in the upside of the AI systems they help train

In the future that Perle Labs envisions, models used in medicine, law, robotics, and public policy will not be trained on mystery data. Their training and evaluation pipelines

will be transparent, attributable, and aligned with the interests of both users and expert contributors.

2. Business Model

2.1 Participants

The Perle Labs network involves multiple categories of participants, each with distinct roles and incentives.

1. Expert Contributors

Expert contributors are the core of the Perle Labs ecosystem. They are individuals with domain-specific knowledge in areas such as medicine, law, robotics, language, cybersecurity, finance, and policy. Expert contributors perform labeling, review, evaluation, and feedback tasks on data and model outputs.

Expert contributors register their profiles, provide relevant credentials when appropriate, and pass qualification tasks tailored to specific domains. Their performance over time is tracked through a reputation system that records accuracy, consistency, and specialization.

2. Task Requesters

Task requesters are entities that need high-quality data and evaluations. They include AI teams at large technology groups, frontier AI laboratories developing advanced models, healthcare AI companies, robotics and autonomous systems firms, and other organizations that depend on reliable data.

Task requesters define task requirements such as domain, language, data modality, quality standards, timelines, and budget. They submit tasks through the Perle Labs marketplace and receive processed results, along with provenance information and quality metrics.

2.2 Expert Contributor Network

The primary value proposition of Perle Labs lies in its expert contributor network. The network is composed of verified professionals rather than anonymous workers.

Examples include:

- Physicians and medical specialists who annotate clinical notes and medical images
- Legal professionals who review contracts, case summaries, and regulatory texts
- Robotics engineers who annotate and evaluate embodied intelligence data
- Linguists and localization experts who handle nuanced language tasks across multiple regions
- Security researchers who perform red teaming and risk assessment of model behavior

Contributors are rewarded not only with immediate payments but also with long-term benefits through reputation and token exposure. High-reputation contributors can gain access to more complex and better-compensated tasks, as well as influence within the ecosystem.

2.3 Enterprise and Institutional Clients

Perle Labs serves a range of enterprise and institutional clients. Specific company names are not disclosed, but the following categories are illustrative.

- Large technology conglomerates in consumer electronics and enterprise software that require multilingual, high-quality datasets for foundation models, assistants, and recommendation systems
- Frontier AI labs that build cutting-edge models and agents and require expert evaluation, safety testing, and reinforcement learning from human feedback
- Healthcare AI firms that develop diagnostic tools, decision support systems, and medical workflow automation, and therefore depend on clinician-validated data
- Robotics and autonomous systems companies that need sensor-rich datasets, physical environment annotations, and expert review of edge case scenarios

Perle Labs works with these clients to design tailored data pipelines, define quality metrics, and ensure that output meets both technical and regulatory requirements.

2.4 Revenue Model

Perle Labs generates revenue through several channels:

- Enterprise contracts for large-scale data programs
- Usage-based fees for self-service access to the platform and APIs
- Premium services such as safety evaluations, RLHF program design, and custom benchmarks
- In the future, potential licensing of opt-in, pre-annotated datasets where contributors consent to broader usage

3. Architecture

3.1 Layered Structure

Perle Labs is built as a modular, layered stack in order to support flexibility, scalability, and clear separation of concerns:

1. Data and Task Layer

This is the layer in which data is ingested, processed, annotated, and validated. It handles text, images, video, audio, code snippets, structured data, and robotics or sensor streams.

2. Coordination and Reputation Layer

This layer contains the logic for task routing, reputation calculation, reward allocation, and compliance checks. It integrates with smart contracts, off chain services, and quality control algorithms.

3. Settlement and Record Layer

On this layer, transactions, task identifiers, reputation updates, and token transfers are recorded on the chain. This provides a tamper resistant ledger of work histories and economic flows.

4. Application and Interface Layer

This layer provides dashboards, client integration interfaces, SDKs, and tools for contributors and validators. It hides protocol complexity behind user friendly flows while preserving transparency and verifiability for those who need it.

3.2 Expert Routing and Reputation

The reputation system is central to the functioning of Perle Labs.

Key features include:

- Multi-dimensional reputation scores that capture accuracy, consistency, domain specialization, and historical reliability
- Use of hidden benchmark tasks and peer review mechanisms to measure the true quality of contributions
- Dynamic routing that uses reputation data to match tasks with the most suitable experts, rather than simply with the fastest or cheapest worker

Reputation is stored as on chain or verifiable state, allowing contributors to carry their track records across different campaigns, seasons, and possibly other protocols that choose to integrate Perle Labs credentials.

4. Strategic Impact

Perle Labs sees the future of AI as closely tied to data sovereignty and verifiable human oversight. The project aims to support three main outcomes, creating a new standard for trust and accountability in the AI ecosystem:

1. For governments and regulators:

Perle Labs aims to provide a robust, auditable protocol that can be seamlessly integrated into emerging regulatory frameworks for safe and transparent AI data pipelines. The challenge for policymakers is moving beyond theoretical guidelines to enforceable technical standards. Perle Labs addresses this by establishing a de facto standard for documenting and auditing the entire provenance of training and evaluation data, particularly for critical systems used in public health, infrastructure, and defense.

This protocol offers verifiable proof of the human expertise involved in the data curation process, providing regulators with the necessary tools to assess model alignment, bias mitigation, and overall system integrity. By making the data supply chain transparent and on-chain auditable, Perle Labs helps to simplify compliance and fosters a foundation of trust between government bodies and the AI industry.

2. For enterprises and AI labs:

The platform offers a vital solution for organizations that cannot risk relying on opaque or potentially compromised data sources. Enterprises and advanced AI labs can use Perle Labs to source, verify, and meticulously document the high-quality data that underpins their most sensitive and high-stakes models. This capability is crucial for risk management.

By plugging into the Perle Labs infrastructure, these organizations can significantly reduce compliance risk associated with data origin and usage, strengthen their safety cases through expert-validated human feedback, and build user trust by demonstrating a commitment to verifiable data integrity. Furthermore, the platform's ability to provide domain-specific, expertly annotated datasets for areas like healthcare and autonomous systems offers a competitive advantage, leading to more reliable, accurate, and ethical AI products.

3. For expert contributors:

Perle Labs is fundamentally committed to creating an environment in which professionals can turn their valuable, domain-specific expertise into a verifiable, portable on-chain asset. This ecosystem is designed to reward consistent quality and specialization, enabling experts to grow both their income and their professional reputation over time. In contrast to the low-wage,

anonymous nature of traditional gig work often used for data labeling, Perle Labs aspires to support a specialized expert economy. Contributors are incentivized through reputation scores, better compensation for complex tasks, and token exposure, aligning their long-term interests with the success and quality of the protocol. This professional ecosystem ensures that the most critical tasks—those requiring nuanced judgment in fields like law, medicine, or robotics, are handled by accountable, verified human experts.

5. Tokenomics



5.1 Basic Information

The native token of the Perle Labs protocol is called PRL

- Token name (ticker): PRL
- Total supply: 1,000,000,000 PRL
- Supply type: fixed, no further minting planned

The PRL token serves as a coordination and incentive asset within the ecosystem.

5.2 Allocation

The total supply of 1,000,000,000 PRL is allocated as follows:

- Team: 17.00%
- Investors: 27.66%
- Ecosystem: 17.84%
- Community: 37.50%

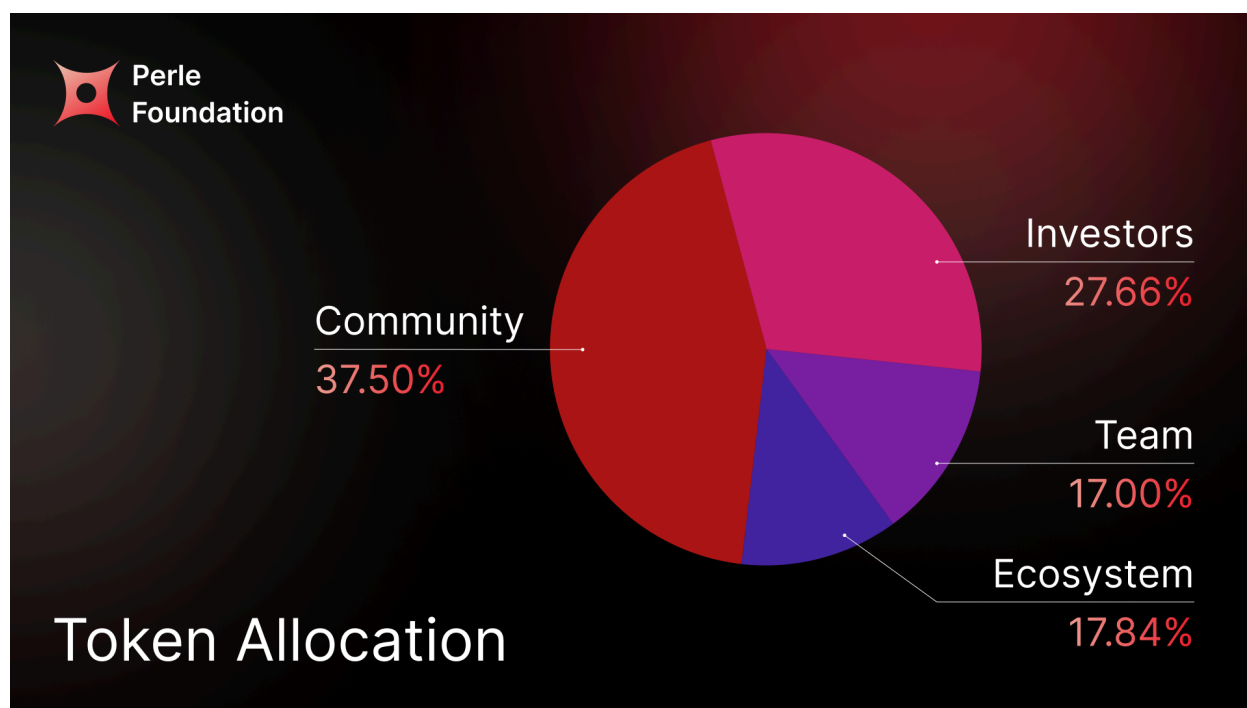
The following allocation is designed to balance long term commitment of the core team, fair compensation for risk-bearing investors, support for ecosystem partners, and substantial ownership for contributors and community members.

Contract Address:

PERLEQKUNUp1dgFZ8EvYXHdN9d6ZQqfGxALDvfs6pDs
<https://solscan.io/token/PERLEQKUNUp1dgFZ8EvYXHdN9d6ZQqfGxALDvfs6pDs>

Perle Labs is deployed on the Solana blockchain, utilizing its high-performance execution environment to record data provenance, contributor reputation, and task verification in a transparent and tamper-resistant manner. We intend to allocate the total team supply of 170,000,000 PRL.

5.3 Vesting and Circulation



1. Team (17.00%)
 - Release at Token Generation Event (TGE): 0%
 - Cliff: 25% unlock at 12 months
 - Vesting: remaining 75% vests linearly in monthly increments over the following 36 months
 - Full unlock: at 48 months from TGE
2. Investors (27.66%)
 - Release at TGE: 0%
 - Cliff: 25% unlock at 12 months

- Vesting: remaining 75% vests linearly in monthly increments over the following 36 months
- Full unlock: at 48 months from TGE

3. Ecosystem (17.84%)

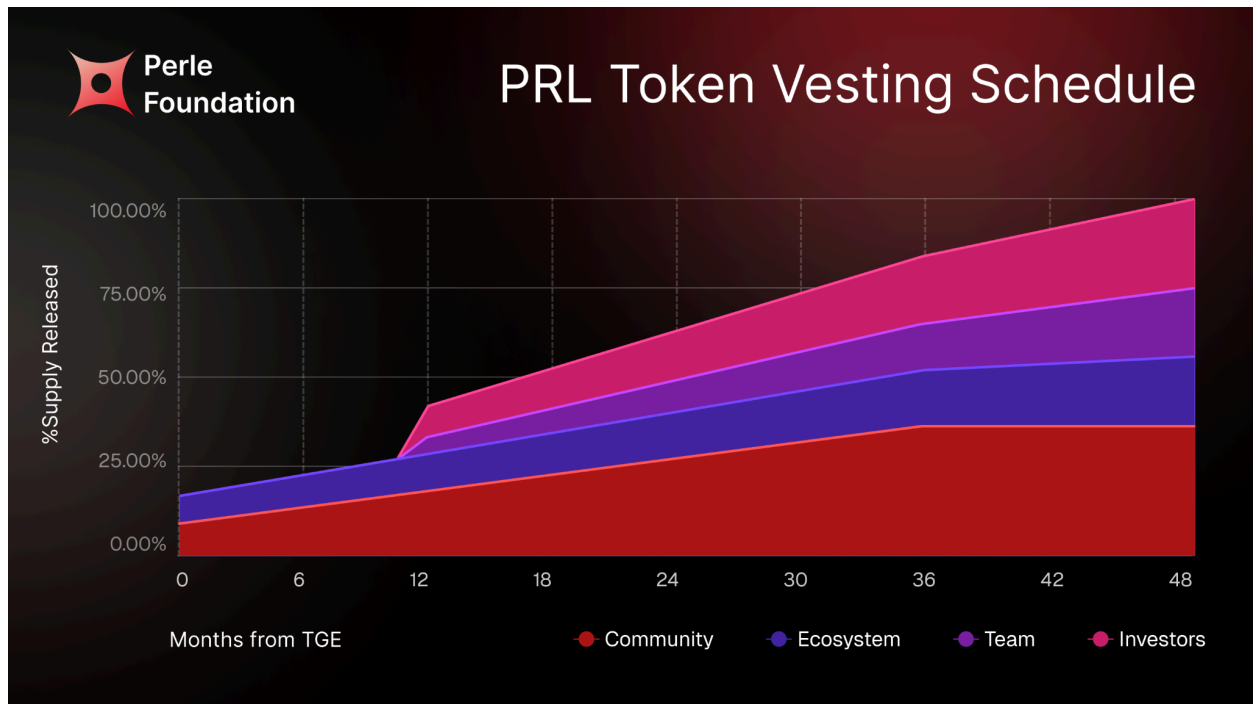
- Immediate release at TGE: 10% of total supply
- Remaining ecosystem allocation: linear vesting over 48 months
- Use: strategic partnerships, ecosystem development, liquidity, and protocol growth

4. Community (37.50%)

- Immediate release at TGE: 7.5% of total supply
- Remaining community allocation: linear vesting over 36 months
- Use: contributor rewards, community campaigns, early user incentives, and long-term participation programs

This structure aims to support a smooth and predictable increase in circulating supply while giving the network enough time to build real usage.

Circulating supply on Day 1 will be 17.5%.



5.4 Token Utility

The PRL token plays multiple roles in the Perle Labs ecosystem.

1. Access

Holding PRL may enable access to certain platform features, tools, or workflows within the Perle Labs ecosystem. This includes eligibility for select functionalities as the platform continues to expand.

2. Priority

PRL may provide priority positioning within the platform, such as earlier access to new features, premium workflows, or differentiated service tiers as they become available.

3. Future Development

Holding PRL may position participants to benefit from future platform developments as they are introduced. The AI data landscape is evolving quickly, and the team intends to continuously explore new features at the frontier of labeling, curation, and model feedback loops. Token holders may be among the first to engage with these developments as they roll out, creating an open-ended relationship between the token and the platform's expanding role in the AI supply chain.

6. Roadmap

Perle Labs is building the foundational infrastructure for trusted AI Data. The roadmap reflects approximately the progression of our platform to institutional-grade adoption.

Phase 1: Current

- On chain recording, contributor reputation and verification scores
- Opening the platform to a broader global contributor base
- Token Generation Event (TGE) and distribution of PRL

Phase 2: Global Expert Economy

- Formation of specialized expert guilds and domain specific networks
- Expansion into new geographies and languages to support global AI systems
- Creation of Perle AI Labor Marketplace

Phase 3: Enterprise Scale and Standardization

- Deep integrations and stronger collaboration with frontier AI labs
- Development of standardized data schemas and evaluation benchmarks

- Continued expansion into high-stakes verticals including healthcare, robotics, and government sectors
- Growth of long term enterprise contracts and recurring revenue streams

By the end, Perle Labs aims to become the default choice for organizations that require verifiable, high-integrity data.

7. Conclusion

Perle Labs is a protocol for sovereign, expert-driven AI data. In a world where synthetic content is abundant and data supply chains are opaque, Perle Labs focuses on human expertise, transparent attribution, and aligned incentives.

By connecting expert contributors, demanding clients, and a robust on-chain infrastructure, Perle Labs aims to provide the trusted data foundation that high-stakes AI systems require. The PRL token coordinates this network, rewards quality, and supports the long term evolution of the protocol.

The question for the AI era is not only how powerful models can become, but how trustworthy their foundations are. Perle Labs is committed to building the data layer that makes trustworthy AI possible.

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