QUIL-A® - SAPONIN VACCINE ADJUVANT

- A highly concentrated and potent saponin adjuvant purified from bark extract of the *Quillaja saponaria* Molina tree.
- Well proven and extensively studied:
  - ≥ 14,100 hits on Google Scholar
  - ≥ 370 unique publications on PubMed.gov
- +35 years of safe and effective use in commercial vaccines
- Stimulates both the cell-mediated (Th1) and the antibody-mediated (Th2) immune response to antigens → Potential to combat a wide range of bacterial and viral pathogens
- Cost-effective due to very low dose requirements (i.e. ≤ 1 mg/dose for cattle)
- The adjuvant efficacy of Quil-A® is verified by in vivo vaccine tests for each raw material batch
- EU GMP (Part I: Medicinal Products for Human and Veterinary Use) certified production

Product Presentation:
Quil-A® is a highly purified quillaja saponin product which has been specifically developed for use as an adjuvant in vaccines. Quil-A® saponin was originally purified and characterized by Dr. Pharm. Kristian Dalsgaard in 1974 and adapted for commercial scale production in cooperation with Brenntag Biosector.

Quil-A® consists of a complex mixture of ca. 25 different saponin molecules which have the triterpenoid backbone in common. It is a very versatile adjuvant due to its ability to induce a well-rounded immune response to combat both intracellular (Th1) and extracellular (Th2) pathogens.

Quil-A® saponin has the ability to form cage-like ISCOM particles together with cholesterol and phospholipids which can further increase the potency of the adjuvant and reduce local reactogenicity. Furthermore, novel nanoparticle adjuvants containing quillaja saponin as the active component are currently being developed.

Quil-A® is supplied as water-soluble lyophilized powder with minimum 95% dry matter. The product has been sterile filtered prior to lyophilization to ensure a low bioburden in the final product and has a long shelf life period. The product is also available with the antioxidant ascorbic acid added which may improve stability of aqueous solutions of the product.

Main applications:
- Adjuvant in veterinary vaccines
- Active component of ISCOM and nanoparticle adjuvants
- Raw material for QS-21 and other saponin fractions

Standard Packaging:
Quil-A® is supplied in the following standard packaging options:
- 1 gram in tablet jar (HDPE) with tear-band cap (LDPE)
- 5 gram in tablet jar (HDPE) with tear-band cap (LDPE)
- 100 gram tablet jar (HDPE) with tear-band cap (LDPE)

About BRENNTAG BIOSECTOR
Brenntag Biosector is a leader in the global vaccine adjuvants market and has a long history of producing high quality products. Originally founded in 1939, the company’s products are widely accepted as the international standard within their classes.