

R-BIOPHARM - Ridascreen®

BIOTIN (VITAMIN H) (ELISA kit)

● Intended use

Competitive Enzyme Binding Assay For The Quantitative Analysis Of Biotin In Vitamin Enriched Food, Feed And Drugs (Additional Sample Preparation Methods For Milk, Milk Powder/Baby Formula, Vitamin Tablets And Premixes With C18 Columns Are Available On Request).

● General

Biotin, also known as vitamin H, is an important nutritional factor and food additive, playing a major role in the metabolism of both humans and animals alike. Biotin acts as a coenzyme and participates in the process of gluconeogenesis, biosynthesis of fatty acids and the metabolism of amino acids. Biotin deficiency in mammals leads to growth inhibition, loss of appetite and reduced utilization of food components. Advanced stages of avitaminosis manifest themselves in hair loss, dermatitis and signs of paralysis. The biotin requirement for adults is between 100 and 200 mg per day. Using the Ridascreen® Biotin Assay, it is possible to detect biotin in vitamin enriched food, feed, and drugs rapidly and with accuracy.

Materials Provided:	Materials Required But Not Provided:
<ul style="list-style-type: none">- 1 x Microtiter Plate (12 strips with 8 removable wells each) 96 well coated with avidin.- 6 x Biotin Standard Solution, 1.25 ml each; 0 ppt (zero standard), 12 ppt, 37 ppt, 111 ppt, 333 ppt, 1,000 ppt biotin in buffer.- 1 x Conjugate (peroxidase conjugated biotin concentrate); red cap.- 1 x Substrate, 7 ml solution (contains urea peroxide); green cap.- 1 x Chromogen, 7 ml solution (contains tetramethylbenzidine); blue cap.- 1 x Stop Reagent, 14 ml solution (contains 1 M sulfuric acid); yellow cap.- 1 x Buffer, 50 ml conjugate and sample dilution buffer.	<ul style="list-style-type: none">- Laboratory Grinder/Mincer.- Microtiter Plate Spectrophotometer.- Centrifuge.- Shaker.- Ultrasonic Bath.- Autoclave (for milk samples only).- Graduated Pipettes- Micropipettes: 50 µl- and 100 µl.

Kit Specifications:

Microtiter Plate Format:	- 96 Well.
Detection Limit:	- Milk: approx. 0.3 µg/kg (ppb). - Milk Powder: approx. 3 µg/kg (ppb). - Grain Products: approx. 1.2 µg/kg (ppb). - Vitamin Powder, Tablets, Juice: approx. 120 ng/kg (ppt).
Time Requirement:	- 1 h 30 min.
Sample Preparation:	- Homogenization (optional digestion with alpha-Amylase), - - Precipitation (optional Ascorbase-treatment).
Cross Reaction:	- Biotin 100%. - Biotin-4-Amidobenzoate 89%. - Biocytin 83%.
Standards:	- 0/12/37/111/333/1,000 ppt.
Samples Per Kit:	- Up to 42.
Measurement:	- Microtiter Plate Reader (450 nm).
Product ID #:	- R2201.