STREPTOMYCIN ELISA (5111STREP)

General

Streptomycin and Dihydrostreptomycin belong to a group of carbohydrate containing antibiotics called aminoglycosides. All the aminoglycosides are potentially toxic compounds causing significant damage in vestibular and auditory functions in humans as well as in animals. Within the European Union, maximum residue limits (MRLs) for streptomycin are in force for several matrices.

The **Streptomycin ELISA** is a competitive enzyme immunoassay based on antibodies directed against streptomycin.

Kit characteristics

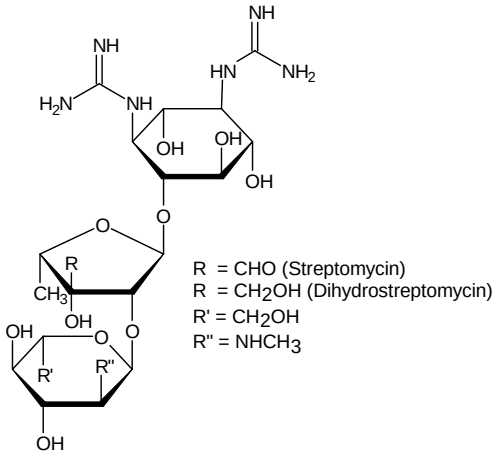
***Microtiter plate*:**
96 Wells
12 x 8 Breakapart

***Antibody cross-reactivity*:**

Streptomycin	100%
Dihydrostreptomycin	100%
Neomycin	< 0.1%
Kanamycin	< 0.1%
Gentamicin	< 0.1%
Sisomycin	< 0.1%

Conjugate:
Streptomycin-HRP stabilized

Standard range (ready-to-use):
0, 0.25, 0.5, 1.0, 2.0, 10 and 20 ng/ml



Chemical structure of (dihydro)streptomycin

Assay characteristics

Matrices	***LOD (ppb)***
Milk	4
Serum	2
Tissue (meat, shrimp)	10
Egg	2
Urine	4
Honey	5
Royal Jelly	5

The Limit of detection (LOD) is calculated as: Xn+3SD and is determined under optimal conditions.

Sample preparation
For milk, serum, tissue, egg, urine, honey and royal jelly fast and efficient extraction methods are included in the kit manual.

Procedure
Antibody, conjugate and sample/standard are pipetted into the wells and incubated for one hour at 2˚C - 8˚C. After a washing procedure ready-to-use substrate is added and incubated for 30 minutes at 20°C - 25°C. The reaction is stopped and the absorbance is read in a spectrophotometer at 450 nm.
EuroProxima's user-friendly software converts the measured optical density into the concentration of the metabolite in the starting material.