HealthDiagnostic

Genistein

Labmaster Genistein TR-FIA

Quantitative time-resolved fluoroimmunoassay

The Researcher's new Tool for Studies of Anti-Carcinogenic Potency of Isoflavonoids

Genistein is a one of the weakly estrogenic isoflavones, which occurs in soy beans and in smaller amounts in some other beans and plants.

Isoflavonoids, specifically Genistein and Daidzein, have been implicated in the prevention of cancers, possibly through multiple effects.

The TR-FIA method for plasma Genistein provides a new procedure for the assay of Genistein for large screening studies.

The method is reliable, practical, sensitive and specific for Genistein. Crossreaction does not influence the results.

Genistein TR-FIA

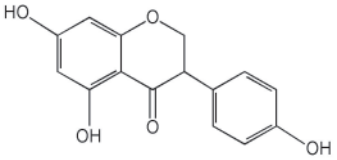
WHAT IS GENISTEIN ?

Background

Isoflavonoids are a group of diphenolic hormone-like compounds of dietary origin that are of great interest particularly because of their anti-carcinogenic potency, but also because of their association with other Western diseases like coronary heart disease.

These isoflavonoids are derived mainly from soy-protein products, while clover seeds and leaves are a rich source of Biochanin A and Formononetin.

Genistein precursors such as Genistin and Biochainin A are converted by the intestinal microflora to Genistein into gut.



GENISTEIN (4',5,7- trihydroxyisolavone)

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PERFORMANCE CHARACTERISTICS

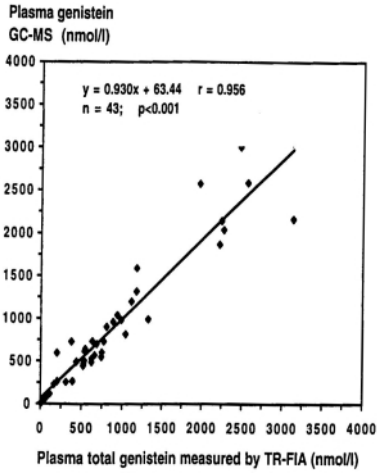
Specificity of Genistein Antisera

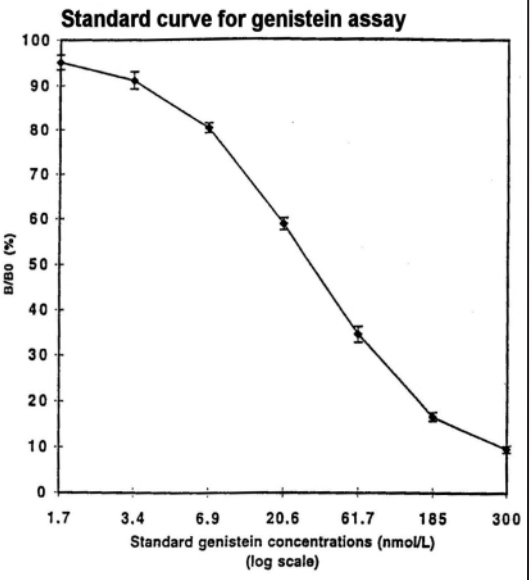
Compound	% cross-reactivity
Genistein	100.0
Daidzein	2.5
Biochanin A	500.0
Daidzin	1.0
Dihydrogenistein	11.3
Genistin	7.6
Equol	0.1
O-Desmethylangolensin	0.0
Luteolin	0.0
Quercetin	0.0

Precision

Intra- and interassay CVs for plasma genistein by TR-FIA

Sample	Concentration (nmol/l)	Intra-assay CV (%)	Inter-assay CV (%)
Plasma method			
Low	4.3	4.7 (n=8)	6.7 (n=8)
Medium	20.8	3.8 (n=8)	5.9 (n=8)
High	73.8	2.9 (n=8)	6.1 (n=8)

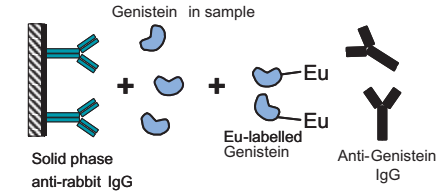




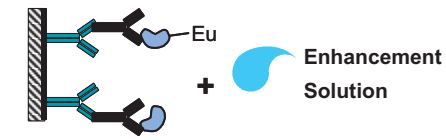
THE METHOD

COMPETITIVE IMMUNOASSAY

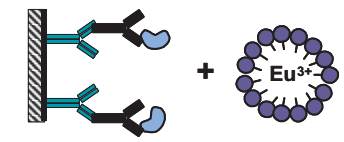
- **A sample preparation by hydrolyze and ether extraction**



- **90 minutes incubation**
- **Aspiration and washing**



- **5 minutes incubation**



- **Fluorescence measurement**

ORDERING INFORMATION

Labmaster Genistein TR-FIA

- Cat. no.: 1212-2003
- Includes:
  - microtitration plate (96 wells)
  - reagents for testing standards and samples
  - instructions for use

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