

ARG82188 Peroxidase Activity Assay Kit (Colorimetric)

Package: 100 tests
Store at: -20°C

Summary

Product Description	ARG82188 Peroxidase Activity Assay Kit (Colorimetric) can be used to measure Peroxidase activity in serum, plasma, urine, tissue and cell culture supernatants.
Tested Reactivity	Hu, Ms, Rat, All
Tested Application	FuncSt
Target Name	Peroxidase
Conjugation Note	Read at 570 nm (colorimetric), or 530/585 nm (fluorometric)
Sensitivity	4 U/L (colorimetric); 0.8 U/L (fluorometric)
Detection Range	2 - 50 U/L (colorimetric); 0.1 - 5 U/L (fluorometric)
Sample Type	serum, plasma, urine, tissue and cell culture supernatants
Sample Volume	10 µl
Alternate Names	TPO; EC 1.11.1.8; TDH2A; Thyroid peroxidase; MSA; TPX

Application Instructions

Application Note	Please note that this kit does not include a microplate.
Assay Time	20 min

Properties

Form	Liquid
Storage instruction	Store the kit at -20°C. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TPO
Gene Full Name	thyroid peroxidase
Background	This gene encodes a membrane-bound glycoprotein. The encoded protein acts as an enzyme and plays a central role in thyroid gland function. The protein functions in the iodination of tyrosine residues in thyroglobulin and phenoxy-ester formation between pairs of iodinated tyrosines to generate the thyroid hormones, thyroxine and triiodothyronine. Mutations in this gene are associated with several disorders of thyroid hormonogenesis, including congenital hypothyroidism, congenital goiter, and thyroid hormone organification defect IIA. Multiple transcript variants encoding distinct isoforms have been identified for this gene, but the full-length nature of some variants has not been determined. [provided by RefSeq, May 2011]
Function	Iodination and coupling of the hormonogenic tyrosines in thyroglobulin to yield the thyroid hormones T(3) and T(4). [UniProt]

PTM

Glycosylated.

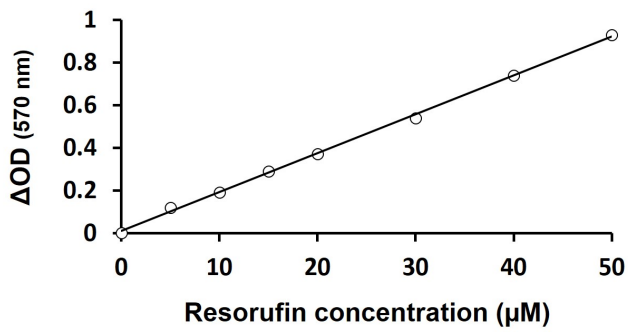
Heme is covalently bound through a H₂O₂-dependent autocatalytic process. Heme insertion is important for the delivery of protein at the cell surface.

Cleaved in its N-terminal part. [UniProt]

Cellular Localization

Membrane; Single-pass type I membrane protein. Isoform 3: Cell surface. [UniProt]

Images



ARG82188 Peroxidase Activity Assay Kit (Colorimetric) typical data demonstration image

ARG82188 Peroxidase Activity Assay Kit (Colorimetric) results of a typical data with optical density reading at 570 nm.