Human Tryptophan Hydroxylase 1/TPH-1 Alexa Fluor® 532-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF5276X
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Tryptophan Hydroxylase 1/TPH-1 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant human Tryptophan Hydroxylase 1/TPH-1 Met102-Pro403 Accession # P17752
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Tryptophan Hydroxylase 1 (TPH-1) is a 50-60 kDa intracellular enzyme that belongs to the biopterin-dependent, aromatic amino acid hydroxylase family. It is expressed in gut enterochromaffin cells and pineal gland. TPH-1 catalyzes the hydroxylation of L-Trp, which is the rate-limiting step in serotonin biosynthesis. Human TPH-1 is 444 amino acids (aa) in length. It contains an N-terminal regulatory domain (aa 1-98), a catalytic region (aa 99-424), and a C-terminal Leu-zipper tetramerization domain (aa 425-444). TPH-1 is phosphorylated on Ser58, and subsequently binds to 14-3-3 proteins, resulting in activation. It functions as a noncovalent Fe-binding 230 kDa homotetramer. There are three potential splice variants. One shows a 29 aa substitution for aa 438-444, a second shows a 50 aa substitution for aa 157-444, and a third shows a 68 aa substitution for aa 1-21. Over aa 102-403, Human TPH-1 shares 95% aa identical with mouse TPH-1.

PRODUCT SPECIFIC NOTICES

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475