

3-methoxytyramine rabbit pAb – IS1019

Ref: IS1019-sp

The anti-3-Methoxytyramine (3-MT) antibody IS1019 is a rabbit polyclonal antibody developed to be highly affine and specific. In combination with optimal samples preparation using [STAINperfect immunostaining kit A](#), this antibody allows direct 3MT visualization in whole mount, cell culture and tissue sections.

Clonality	Polyclonal antibody
Host	Rabbit
Reactivity	Reacts with all species
Tested samples	Whole mount, cell culture, tissue sections & ELISA
Staining procedure	STAINperfect immunostaining kit A
Format	50µL (approx. 40 tissue sections)

INFORMATIONS

Product overview

Product name	3-Methoxytyramine antibody
Synonyms	Anti-3-Methoxytyramine polyclonal antibody 3-MT polyclonal antibody
Immunogen	Conjugated 3-Methoxytyramine
Specificity	When tested in competitive ELISA, the anti-conjugated 3-Methoxytyramine antibody do not show significant cross-reactivity with several competitors including Tyramine and Dopamine conjugates

Reconstitution & storage

Form	Liquid
Purity	Purified anti-serum
Storage buffer	Store at +4°C for short term (1-2 months). Aliquot and store at -20°C for long term. Avoid repeated freeze / thaw cycles
Material safety datasheet	Download MSDS

PROTOCOLS

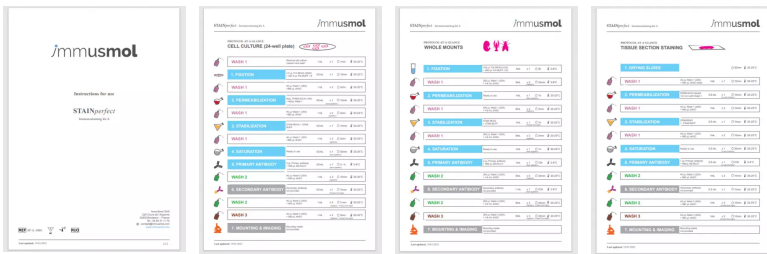
IF - Cell cultures, Whole mounts, Tissue sections Dilute antibody with the antibody diluent provided in the [STAINperfect immunostaining kit A](#). Use at 1/250 -1/1000 dilution. Follow the STAINperfect protocol suited to your sample

Comments Optimal working dilutions must be determined by the end-user

Restrictions For research use only

Full protocol [Download STAINperfect protocol for 3-MT staining](#)

Protocols-at-a-glance



[Complete Instructions for Use](#)

[Protocol-at-a-glance for cell cultures](#)

[Protocol-at-a-glance for whole mounts](#)

[Protocol-at-a-glance for tissue sections](#)

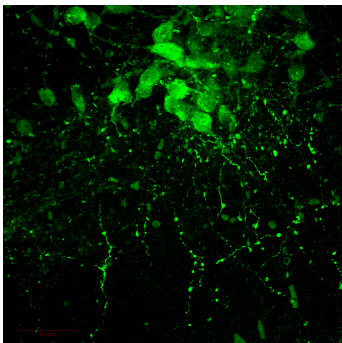
REFERENCES

Antibody not yet cited. Submit an article and [get a 10% discount](#).

Selected publications on 3-Methoxytyramine:

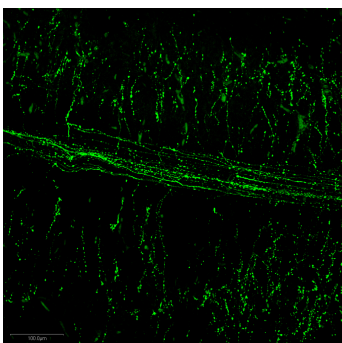
- [van Duinen N et al. Plasma levels of free metanephrines and 3-methoxytyramine indicate a higher number of biochemically active HNPGL than 24-h urinary excretion rates of catecholamines and metabolites. Eur J Endocrinol. 2013 Aug 28;169\(3\):377-82](#)
- [Sotnikova TD et al. The dopamine metabolite 3-methoxytyramine is a neuromodulator. PLoS One. 2010 Oct 18;5\(10\):e13452.](#)
- [Alachkar A, Brotchie JM, Jones OT. Binding of dopamine and 3-methoxytyramine as L-DOPA metabolites to human alpha\(2\)-adrenergic and dopaminergic receptors. Neurosci Res. 2010 Jul;67\(3\):245-9.](#)

Product pictures



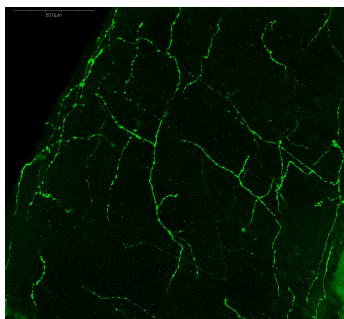
Whole mount hindbrain immunostaining of 3MT containing cells.

Anti-3-Methoxytyramine antibody highlights the soma and projections of 3MT positive neurons in the hindbrain of mouse E14.5 embryo. Staining was performed using STAINperfect immunostaining kit A, following the protocol for whole mounts. Secondary antibody (goat anti-rabbit Alexa Fluor® 488) was used and picture was acquired by confocal imaging at high magnification.



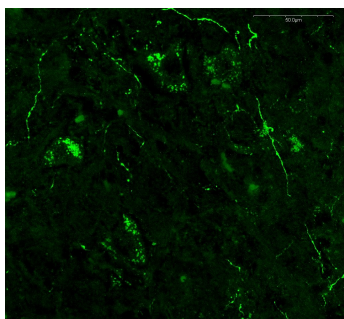
3-MT spinal cord immunostaining of whole-mount mouse embryos

Anti-3-Methoxytyramine antibody highlights the fibers of 3MT neurons in the spinal cord of mouse E14.5 embryo. Staining was performed with STAINperfect immunostaining kit A, following the protocol for whole mounts. Secondary antibody was used and picture was acquired by confocal imaging at high magnification.



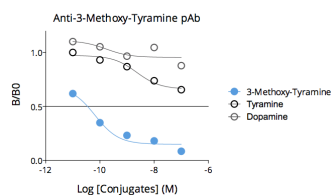
3-MT immunostaining of adult mouse cerebellum

Anti-3-Methoxytyramine antibody highlights the fibers of 3MT neurons in adult mouse cerebellum slices. Staining was performed with STAINperfect immunostaining kit A, following the protocol. Secondary antibody was used and picture was acquired by confocal imaging at high magnification.



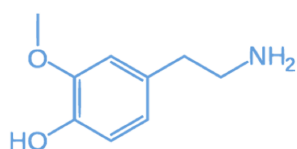
3-Methoxytyramine neuronal staining in free-floating brain sections

Anti-3-Methoxytyramine antibody highlights the presence of 3MT neurons in the midbrain of adult mouse with granular pattern. Staining was performed using STAINperfect immunostaining kit A, on free floated cryosections following the protocol for whole mount samples. Fluorescent labelled secondary antibody was used and picture was acquired by confocal imaging at high magnification.



Affinity & specificity of anti-3-Methoxy-Tyramine antibody

Competitive ELISA demonstrates that low amounts of 3-Methoxy-Tyramine conjugate are required to abolish antigen-antibody reaction (high affinity), while rising concentrations of 3-Methoxy-Tyramine competitors Tyramine or Dopamine do not affect reaction (high specificity).



3-Methoxytyramine (3-MT)

3-Methoxytyramine is a dopamine metabolite synthesized by the enzyme catechol-O-methyltransferase. Together with catecholamines, increased 3-MT urinary excretion is used as a biomarker for biochemically active head and neck paragangliomas. Considered for a long time as a physiologically inactive metabolite, 3-MT was recently shown to induce behavioral effects through the trace amine associated receptor 1 (TAAR1).

Contact information

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To order, review, ask for technical support, visit product page at:

<https://www.immusmol.com/shop/3-methoxytyramine-polyclonal-antibody-bundle/>