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MedChemExpress

## Product Data Sheet

BAY-7598

| Cat. No.: | $\mathrm{HY}-120944$ |
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| CAS No.: | $1816257-74-5$ |
| Molecular Formula: | $\mathrm{C}_{28} \mathrm{H}_{31} \mathrm{~N}_{3} \mathrm{O}_{6}$ |
| Molecular Weight: | 505.56 |
| Target: | MMP |
| Pathway: | Metabolic Enzyme/Protease |
| Storage: | Please store the product under the recommended conditions in the Certificate of |
|  | Analysis. |

## BIOLOGICAL ACTIVITY

Description
$\mathrm{IC}_{50}$ \& Target $\quad$ IC50: 0.085 nM (human MMP12), 0.67 nM (murine MMP12), 1.1 nM (rat MMP12) ${ }^{[1]}$

In Vitro BAY-7598 inhibits human MMP2, MMP3, MMP7, MMP8, MMP9, MMP10, MMP13, MMP14, and MMP16 with IC ${ }_{50}$ S of $44,360,600$, $15,460,12,67,250$, and 940 nM , respectively ${ }^{[1]}$.
BAY-7598 inhibits murine MMP2, MMP3, MMP7, MMP8, and MMP9 with $I C_{50}$ of $45,270,130,54$, and 210 nM , respectively ${ }^{[1]}$.
BAY-7598 inhibits rat MMP2, MMP8, and MMP9 with $I C_{50}$ S of 45,67 , and 1000 nM , respectively ${ }^{[1]}$.
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo
BAY-7598 is a potent, orally bioavailable, and selective MMP12 inhibitor probe with $\mathrm{IC}_{50} \mathrm{~S}$ of $0.085,0.67$ and 1.1 nM for human MMP12, murine MMP12, and rat MMP12, respectively ${ }^{[1]}$.

BAY-7598 has moderate terminal elimination half-life ( $\mathrm{t}_{1 / 2}=4.6 \mathrm{~h}$ and 4.1 h for mouse ( $0.3 \mathrm{mg} / \mathrm{kg}$, iv), mouse ( $5.0 \mathrm{mg} / \mathrm{kg}$, p.o.) , respectively) ${ }^{[1]}$.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

| Animal Model: | Mouse ${ }^{[1]}$ |
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| Dosage: | $0.3 \mathrm{mg} / \mathrm{kg}$ (i.v.) and $5.0 \mathrm{mg} / \mathrm{kg}$ (p.o.) |
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| Administration: | Administered i.v. $(0.3 \mathrm{mg} / \mathrm{kg})$ and p.o. ( $5.0 \mathrm{mg} / \mathrm{kg}$ ) (Pharmacokinetic Analysis) |
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| Result: | $\mathrm{T}_{1 / 2}=4.6 \mathrm{~h}$ and 4.1 h for $0.3 \mathrm{mg} / \mathrm{kg}$ (i.v.) and $5.0 \mathrm{mg} / \mathrm{kg}($ p.o.), respectively. |
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## REFERENCES

[1]. Chemical Probe BAY-7598 MMP12 Inhibitor.

## Caution: Product has not been fully validated for medical applications. For research use only.

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