

Cardiac effects of novel histamine H₂ receptor agonists.

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Supplemental Table S1. EC₅₀ values of drugs agonistic at cardiac H₂ receptors

Potency of histamine and the indicated histamine receptor agonist (first column), the cardiac tissue and species studied (second column), the potencies of the agonists (fourth column) were calculated from the negative decadic logarithm of the EC₅₀-values. The EC₅₀-values indicate the concentration of a drug, where 50% of the maximum effect on force or frequency is noted. In right atrial preparations from animals in this table the beating frequency was measured to assess potency whereas in electrically stimulated strips from the right atrium of the human heart and the left atrium of animals the force of contraction was studied (third column). Typical reports of the histamine effects on the heart are listed in the references (fifth column).

Drug	Tissue	Parameter	Potency	Reference
Histamine	Human right atrium	Increase in force	pD ₂ =5.54 ± 0.09	(Zerkowski et al., 1993; Gergs et al., 2019)
Histamine	Human right atrium	Increase in force	pD ₂ =5.19 ± 0.30	(Poli et al., 1994)
Amthamine	Human right atrium	Increase in force	pD ₂ =5.38 ± 0.36	(Poli et al., 1994)
Impromidine	Human right atrium	Increase in force	pD ₂ =6.59 ± 0.35	(Poli et al., 1994)
Dimaprit	Human right atrium	Increase in force	pD ₂ =4.37 ± 0.59	(Poli et al., 1994)
Histamine	Guinea pig right atrium	frequency	pD ₂ =6.01 ± 0.24	(Poli et al., 1993)
Amthamine	Guinea pig right atrium	frequency	pD ₂ =6.72 ± 0.11	(Poli et al., 1993)
Dimaprit	Guinea pig right atrium	frequency	pD ₂ =5.32 ± 0.22	(Poli et al., 1993)
Dimaprit	Guinea pig right atrium	frequency	pD ₂ =5.74 ± 0.13	(Krielaart et al., 1990)

Histamine	Rabbit left atrium	Increase in force	5.53 ± 0.06	(Hattori et al., 1988)
Impromidine	Rabbit left atrium	Increase in force	8.69 ± 0.16	(Hattori et al., 1988)
Histamine	H ₂ -TG left atrium	Increase in force	pD ₂ =6.73 ± 0.16	(Gergs et al., 2019)
Dimaprit	H ₂ -TG left atrium	Increase in force	pD ₂ =6.39 ± 0.17	(Gergs et al., 2019)
Amthamine	H ₂ -TG left atrium	Increase in force	pD ₂ =6.59 ±	(Gergs et al., 2019)
UR-Po563	H ₂ -TG left atrium	Increase in force	pD ₂ =8.27 ± 0.18 n=5	This report
UR-Po563	H ₂ -TG left atrium	Time to peak tension	pD ₂ =8.52 ± 0.31 n=5	This report
UR-Po563	H ₂ -TG left atrium	time to of relaxation	pD ₂ =10.45 ± 12.15 n=5	This report
UR-Po563	H ₂ -TG left atrium	time to maximum rate of tension development dF/dt	pD ₂ =8.26 ± 0.18 n=5	This report
UR-Po563	H ₂ -TG left atrium	time to minimum rate of tension development dF/dt	pD ₂ =8.35 ± 0.2 n=5	This report
UR-Po563	H ₂ -TG right atrium	frequency	pD ₂ =8.69 ± 0.18 n=3	This report
UR-MB-158	H ₂ -TG left atrium	Increase in force	pD ₂ =9.86 ± 0.27 n=6	This report
UR-MB-158	H ₂ -TG left atrium	Time to peak tension	pD ₂ =9.52 ± 0.27 n=6	This report
UR-MB-158	H ₂ -TG left atrium	time to of relaxation	pD ₂ =9.37 ± 0.46 n=6	This report

UR-MB-158	H ₂ -TG left atrium	time to maximum rate of tension development dF/dt	pD ₂ =9.78 ± 0.25 n=6	This report
UR-MB-158	H ₂ -TG left atrium	time to minimum rate of tension development dF/dt	pD ₂ =9.64 ± 0.27 n=6	This report
UR-MB-158	H ₂ -TG right atrium	frequency	pD ₂ =9.24 ± 0.98 n=4	This report
UR-MB-159	H ₂ -TG left atrium	Increase in force	pD ₂ =8.21 ± 0.42 n=6	This report
UR-MB-159	H ₂ -TG left atrium	Time to peak tension	pD ₂ =8.41 ± 0.52 n=6	This report
UR-MB-159	H ₂ -TG left atrium	time to of relaxation	pD ₂ =6.13 ± 1.72 n=6	This report
UR-MB-159	H ₂ -TG left atrium	time to maximum rate of tension development dF/dt	pD ₂ =8.25 ± 0.39 n=6	This report
UR-MB-159	H ₂ -TG left atrium	time to minimum rate of tension development dF/dt	pD ₂ =8.34 ± 0.3 n=6	This report
UR-MB-159	H ₂ -TG right atrium	frequency	pD ₂ =8.07 ± 0.55 n=5	This report

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