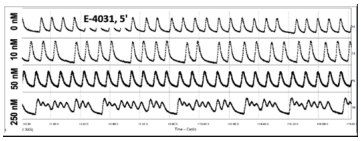
Cor.At® cardiomyocytes in combination with Roche's RTCA Cardio instrument provide a standardized, homogenous and reproducible cell system for the in vitro detection of a compound‘s potential to influence spontaneous beating,
e.g
. frequency and
rhythmicity
. Using our optimized protocol,
Cor.At
®
cardiomyocytes
are cultured in E-Plates Cardio 96, and treated with 5 concentrations of the test compounds. Results obtained in the study will indicate a potential effect on cardiac beating,
e.g
. changes of beating frequency, induction of arrhythmia, or beating arrest.

Cor.At® cardiomyocytes provide a physiologically relevant and predictive in vitro model for cardiac safety screening in early lead optimization. Results obtained in our
electrophysiology
services can therefore be compared directly with results obtained in our cellular toxicity services,
e.g
. the
Cor.At
®
Tox
Test. This improves the ability to determine potential
cardiotoxic
effects of compounds in early stages of drug development, providing better measures to move lead compounds towards pre-clinical and clinical development.

The Cor.At® CardioEffect Screening has been validated in house using 24 drugs with known cardiac safety profile. The assay correctly predicted 23 of the compounds (1
false
negative due to species differences). Reference compounds are included on each assay plate to ensure reproducible results.

More detailed information about the xCELLigence system and the use of Cor.At cells can be found here


E-4031, 5'
0 nM
10 nM
50 nM
250 nM