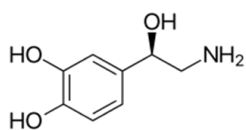


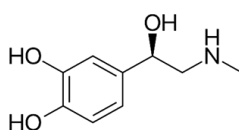
# Bioanalytics, Metabolomics and Pharmacokinetics Shared Resource (BMPK)

## Catecholamines in Plasma

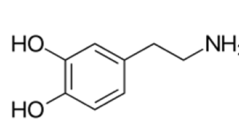
BMPK has established and validated a highly sensitive liquid chromatographic tandem mass spectrometry assay (LC-MS/MS) for the analysis of norepinephrine (NE), epinephrine (E), dopamine (DA), and dihydroxyphenylglycol (DHPG; the principal metabolite of NE) in sodium heparin human plasma and in lithium heparin mouse plasma. The assay supports both preclinical and clinical research involving the effects of these stress hormones on the immune system and anti-tumor activity.



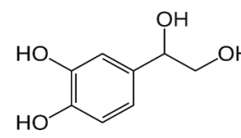
NE



E

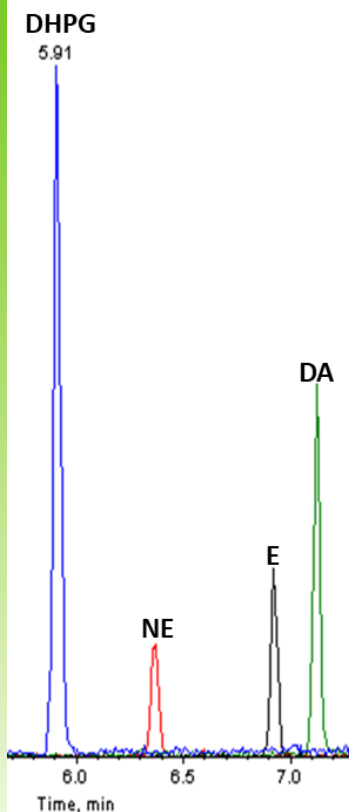


DA



DHPG

CHROMATOGRAM AT THE LOWER LIMIT OF QUANTITATION



### Specifications and Performance

<b>Matrix:</b>	Human plasma (Na Hep) or mouse plasma (Li Hep)
<b>Required Volume:</b>	100 µL
<b>Preparation Procedure:</b>	Derivatization protein precipitation followed by liquid-liquid extraction
<b>HPLC Column:</b>	Phenyl-Hexyl
<b>Mobile Phase:</b>	Water and acetonitrile with formic acid
<b>Flow Rate:</b>	375 µL/min
<b>Detection Type:</b>	Tandem mass spectrometry (MS/MS)
<b>Calibration Range:</b>	10.0 to 2,500 pg/mL for NE, E, and DA 500 to 12,500 pg/mL for DHPG
<b>Calibrator Precision:</b>	5.04% CV (2.41 - 8.49%; n=4) for NE 4.94% CV (2.60 - 6.99%; n=4) for E 3.50% CV (1.02 - 5.90%; n=4) for DA 2.46% CV (0.471 - 3.84%; n=4) for DHPG
<b>QC Precision:</b>	5.81% CV (3.95 - 8.79%; n=18) for NE 6.06% CV (5.07 - 6.92%; n=18) for E 4.29% CV (3.81 - 4.86%; n=18) for DA 3.94% CV (3.42 - 4.62%; n=18) for DHPG

BMPK offers a wide range of bioanalytical and PK/PD modeling services to assist investigators in their basic research, preclinical, and clinical study objectives.

For information on services and pricing, contact [Joshua Prey, MS](mailto:Joshua.Prey@RoswellPark.org), Research Project Administrator (716) 845-3313, [Joshua.Prey@RoswellPark.org](mailto:Joshua.Prey@RoswellPark.org)