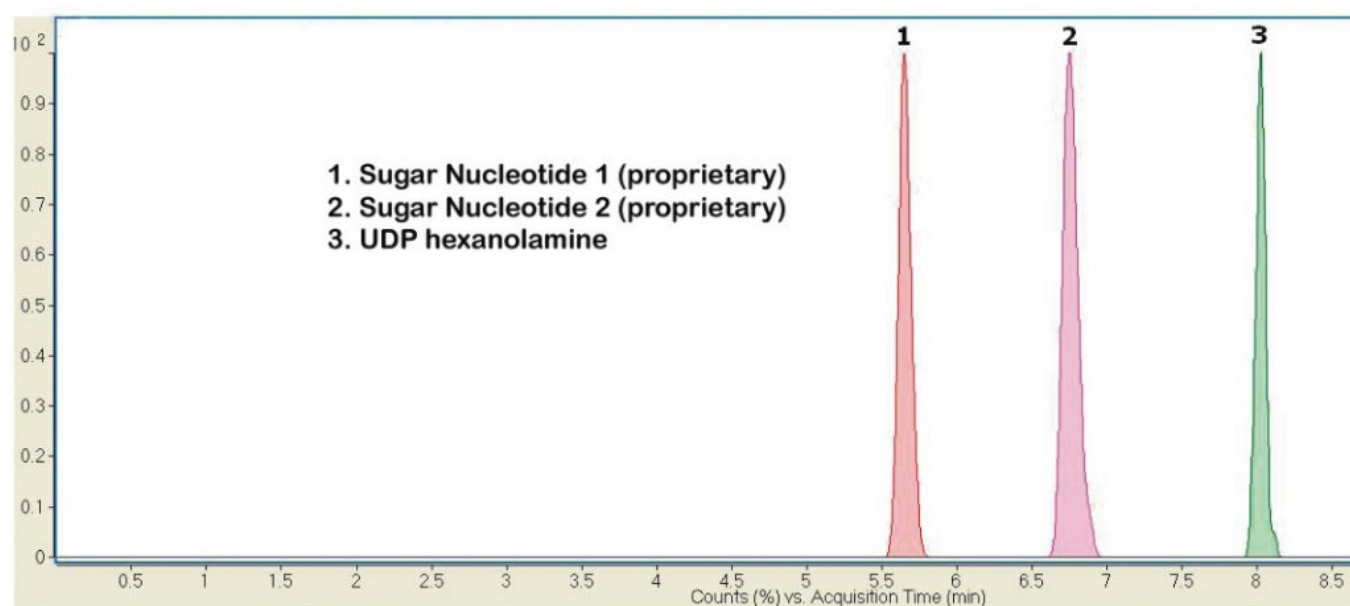


## Sugar Nucleotides Analyzed with LCMS/MS – AppNote

### Separating UDP and CDP Sugars with ANP and Increased Sensitivity

This Method can be used to analyze UDP and CDP Sugars using UDP-Hexanolamine (*a metabolite*) as an Internal standard. The Sugar Nucleotides used in this Application Note are a mixture of compounds that occur in plants and their structure is proprietary.

A potentially powerful tool for profiling Sugar Nucleotides in Metabolomic studies, this Method uses an Inverse Gradient (*HILIC like*); the Mobile Phase uses high organic component which enhances Mass Spec response and assures lower detection limits.



### Method Conditions

**Column:** Cogent Diamond Hydride™, 4µm, 100Å

**Catalog No.:** 70000-15P-2

**Dimensions:** 2.1 x 150mm

**Mobile Phase:**

A: DI Water / 0.1% Ammonium Formate (*pH* 7.2)

B: 90% Acetonitrile / 10% DI Water / 0.1% Ammonium Formate (*pH* 6)

**Gradient:**

Time (minutes)	%B
0	95
10	75
12	75
12.1	95
15	95

**Post Time:** 5 minutes

**Flow rate:** 0.3mL / minute

**Detection:** ESI - neg - Agilent 6410 Triple Quadrupole Mass Spectrometer

**Mass Data:**

1. Compound 1 - the monitored MRM transitions were m/z 535 to m/z 323
2. Compound 2 - the monitored MRM transitions were m/z 564 to m/z 322
3. UDP Hexanalamine (*internal standard*) - the monitored MRM transitions were m/z 502 to m/z 258  
(MRM = multiple reaction monitoring in LC/MS/MS)

**Notes:** Sugar Nucleotides among other metabolites are an important group of compounds to be analyzed when one is trying to understand cellular response to genetic or environmental perturbations.



**Attachment**

**No 61 Sugar Nucleotides Analyzed with LCMS/MS pdf** 0.2 Mb [Download File](#)

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