

**AA-UTP [Aminoallyl UTP sodium salt] *4
mM in TE buffer* *CAS 75221-88-4***

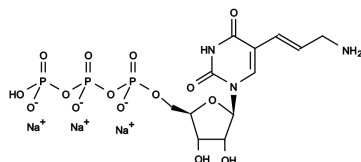
 Catalog number: 17021
 Unit size: 250 uL

Product Details

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	6 months upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	605.16
Soluble In	Water
Chemical Structure	


Applications

The amine-modified uridine 5'-triphosphates (such as aminoallyl-UTP) can be used to produce amine-containing RNA by conventional enzymatic incorporation methods such as transcription, nick translation, random primed labeling, or PCR. Aminoallyl UTP can be readily incorporated into RNA through the conventional enzymatic incorporation techniques. The resulting amine-modified nucleic acids can then be labeled using any of amine-reactive fluorescent dyes, biotins and other amine-reactive reagents. The aminoallyl-modified nucleotides can be incorporated to extremely high and consistent levels compared to the tag-labeled uridine triphosphates that generally have higher stereo-hindrance. Subsequent reaction of the amine-modified nucleic acid with an excess of amine-reactive reagent achieves correspondingly high and consistent labeling efficiencies, regardless of the labeling reagent chosen. This two-step labeling method also eliminates the need to optimize an enzymatic reaction to accommodate different dye-modified nucleotides, which may incorporate at very different rates. This labeling method is widely used for both FISH probes and microarray-based experiments.