



## Technical Support Information Bulletin 1205

### HATU

HATU is an excellent coupling reagent that suppresses racemization. It is more reactive than HBTU or HCTU and may produce higher coupling yield in difficult coupling reactions. Couplings using HATU proceed smoothly and can be enhanced by adding HOAt.

#### Preactivation and Coupling with HATU

1. Dissolve 2.0 equivalents (based on resin substitution) of the protected amino acid in DMF (5 mL/g of resin) and add to the resin.
2. Add 2.0 equivalents (based on resin substitution) of 1.0 M HATU solution and 4.0 equivalents (based on resin substitution) of diisopropylethylamine (DIPEA). 2.0 equivalents (based on resin substitution) of 0.5 M HOAt solution in DMF can be added to suppress racemization.
3. Mix for 3 to 5 minutes at room temperature.
4. Remove the N-terminal protecting group using standard protocols.
5. Add the pre-activated amino acid solution to the resin.
6. Mix for 10-60 minutes until the Kaiser test is negative.
7. Filter and wash the resin with DMF.