

**SIGNIFICANT IR ABSORPTIONS FOR REAGENTS AND
PRODUCTS IN THE ESTER EXP'T (4000 - 1600 cm⁻¹)**

-O-H (water)	3700 cm⁻¹	(broad, large)
-O-H (alcohols)	3300 cm⁻¹	(broad, medium size)
-O-H (carboxylic acid)	3000 cm⁻¹	(very broad, medium size)
-C-H (alkyl groups)	< 3000 cm⁻¹	(sharp, usually large)
C=O (ester)	1740 cm⁻¹	(sharp, large)
C=O (carboxylic acid)	1710 cm⁻¹	(sharp, large)

- ester product will have a strong, sharp peak at ~ 1700 cm⁻¹ (C=O) and a strong sharp peak at ~2900 cm⁻¹ (alkyl C-H)
- pure ester product should have NO significant peaks above 3000 cm⁻¹