

# BIOCHEMISTRY

including biophysical chemistry & molecular biology

Biochemistry, 1996, 35(50), 16165-16173, DOI: [10.1021/bi961211c](https://doi.org/10.1021/bi961211c)

## Terms & Conditions

Electronic Supporting Information files are available without a subscription to ACS Web Editions. The American Chemical Society holds a copyright ownership interest in any copyrightable Supporting Information. Files available from the ACS website may be downloaded for personal use only. Users are not otherwise permitted to reproduce, republish, redistribute, or sell any Supporting Information from the ACS website, either in whole or in part, in either machine-readable form or any other form without permission from the American Chemical Society. For permission to reproduce, republish and redistribute this material, requesters must process their own requests via the RightsLink permission system. Information about how to use the RightsLink permission system can be found at <http://pubs.acs.org/page/copyright/permissions.html>



ACS Publications

MOST TRUSTED. MOST CITED. MOST READ.

Copyright © 1996 American Chemical Society

## Supplementary Material

Figure 1. Reaction of *E. coli* tryptophan indole-lyase (1 mg/mL; 19.2  $\mu$ M) with 10 mM 4,5-thiatryptophan. A. Selected spectra from the set of 1000 spectra collected during the reaction. Spectra shown are: 1, 0.001; 2, 0.003; 3, 0.005; 4, 0.010; 5, 0.020; 6, 0.040; 7, 0.080; 8, 0.160; 9, 0.320; 10, 0.640 seconds, and 11, steady-state (approximately 1 minute after the start of the reaction). B. Time courses for the reaction taken at 345 nm (dotted line), 421 nm (dashed line), and 505 nm (solid line).

Figure 2. Reaction of *E. coli* tryptophan indole-lyase (1 mg/mL; 19.2  $\mu$ M) with 10 mM 4,5-thiatryptophan in the presence of 5 mM benzimidazole. A. Selected spectra from the set of 1000 spectra collected during the reaction. Spectra shown are: 1, 0.001; 2, 0.003; 3, 0.005; 4, 0.010; 5, 0.020; 6, 0.040; 7, 0.080; 8, 0.160; 9, 0.320; 10, 0.640 seconds, and 11, steady-state (approximately 1 minute after the start of the reaction). B. Time courses for the reaction taken at 345 nm (dotted line), 421 nm (dashed line), and 505 nm (solid line).

Figure 3. Reaction of *E. coli* tryptophan indole-lyase (1 mg/mL; 19.2  $\mu$ M) with 10 mM 6,7-thiatryptophan. A. Selected spectra from the set of 1000 spectra collected during the reaction. Spectra shown are: 1, 0.001; 2, 0.003; 3, 0.005; 4, 0.010; 5, 0.020; 6, 0.040; 7, 0.080; 8, 0.160; 9, 0.320; 10, 0.640 seconds, and 11, steady-state (approximately 1 minute after the start of the reaction). B. Time courses for the reaction taken at 346 nm (dotted line), 421 nm (dashed line), and 505 nm (solid line).

Figure 4. Reaction of *E. coli* tryptophan indole-lyase (1 mg/mL; 19.2  $\mu$ M) with 10 mM 7-azatryptophan. A. Selected spectra from the set of 1000 spectra collected during the reaction. Spectra shown are: 1, 0.001; 2, 0.003; 3, 0.005; 4, 0.010; 5, 0.020; 6, 0.040; 7, 0.080; 8, 0.160; 9, 0.320; 10, 0.640 seconds, and 11, steady-state (approximately 1 minute after the start of the reaction). B. Time courses for the reaction taken at 346 nm (dotted line), 421 nm (dashed line), and 498 nm (solid line).

Figure 5. Reaction of *E. coli* tryptophan indole-lyase (1 mg/mL; 19.2  $\mu$ M) with 10 mM 7-azatryptophan in the presence of 5 mM benzimidazole. A. Selected spectra from the set of 1000

spectra collected during the reaction. Spectra shown are: 1, 0.001; 2, 0.003; 3, 0.005; 4, 0.010; 5, 0.020; 6, 0.040; 7, 0.080; 8, 0.160; 9, 0.320; 10, 0.640 seconds, and 11, steady-state (approximately 1 minute after the start of the reaction). B. Time courses for the reaction taken at 346 nm (dotted line), 421 nm (dashed line), and 498 nm (solid line).

Figure 6. Reaction of *E. coli* tryptophan indole-lyase (1 mg/mL; 19.2  $\mu$ M) with 10 mM 6-azatryptophan. A. Selected spectra from the set of 1000 spectra collected during the reaction. Spectra shown are: 1, 0.001; 2, 0.003; 3, 0.005; 4, 0.010; 5, 0.020; 6, 0.040; 7, 0.080; 8, 0.160; 9, 0.320; 10, 0.640 seconds, and 11, steady-state (approximately 1 minute after the start of the reaction). B. Time courses for the reaction taken at 421 nm (dashed line), and 501 nm (solid line).

Figure 7. Reaction of *E. coli* tryptophan indole-lyase (1 mg/mL; 19.2  $\mu$ M) with 10 mM  $\beta$ -indazolyl-L-alanine. A. Selected spectra from the set of 1000 spectra collected during the reaction. Spectra shown are: 1, 0.001; 2, 0.003; 3, 0.005; 4, 0.010; 5, 0.020; 6, 0.040; 7, 0.080; 8, 0.160; 9, 0.320; 10, 0.640 seconds, and 11, steady-state (approximately 1 minute after the start of the reaction). B. Time courses for the reaction taken at 346 nm (dotted line), 421 nm (dashed line), and 501 nm (solid line).

Figure 8. Reaction of *E. coli* tryptophan indole-lyase (1 mg/mL; 19.2  $\mu$ M) with 10 mM  $\beta$ -indazolyl-L-alanine in the presence of 5 mM benzimidazole. A. Selected spectra from the set of 1000 spectra collected during the reaction. Spectra shown are: 1, 0.001; 2, 0.003; 3, 0.005; 4, 0.010; 5, 0.020; 6, 0.040; 7, 0.080; 8, 0.160; 9, 0.320; 10, 0.640 seconds, and 11, steady-state (approximately 1 minute after the start of the reaction). B. Time courses for the reaction taken at 346 nm (dotted line), 421 nm (dashed line), and 501 nm (solid line).

Figure 1

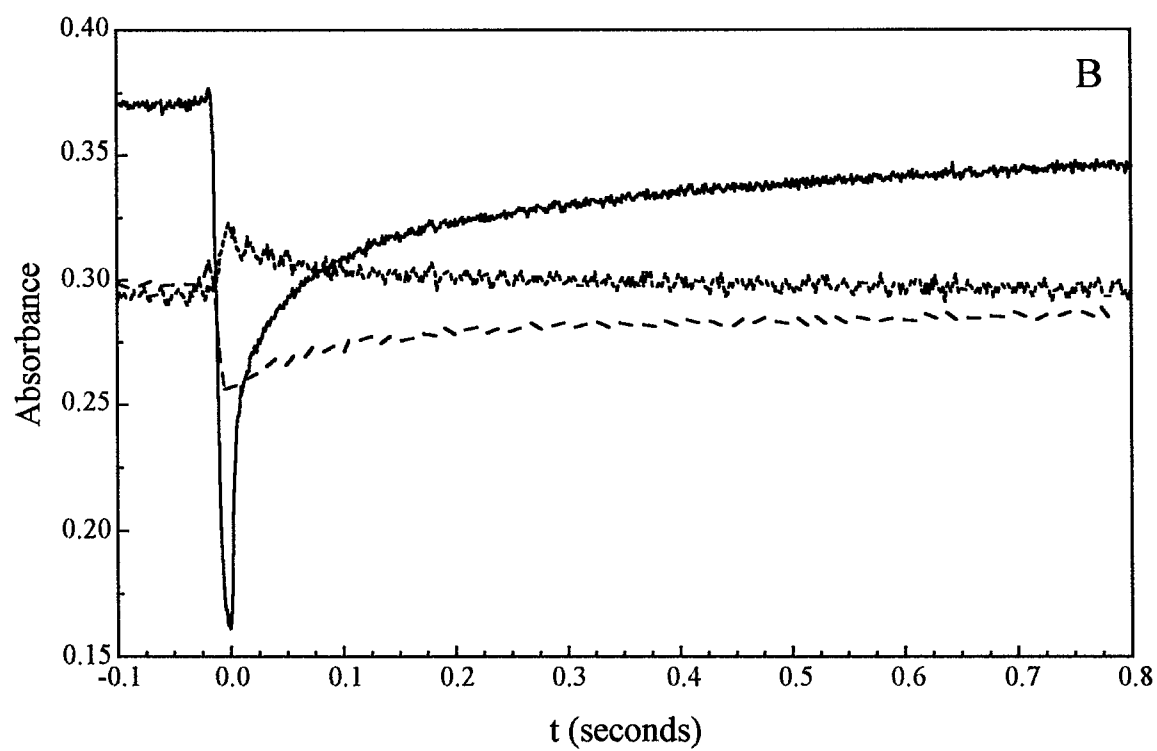
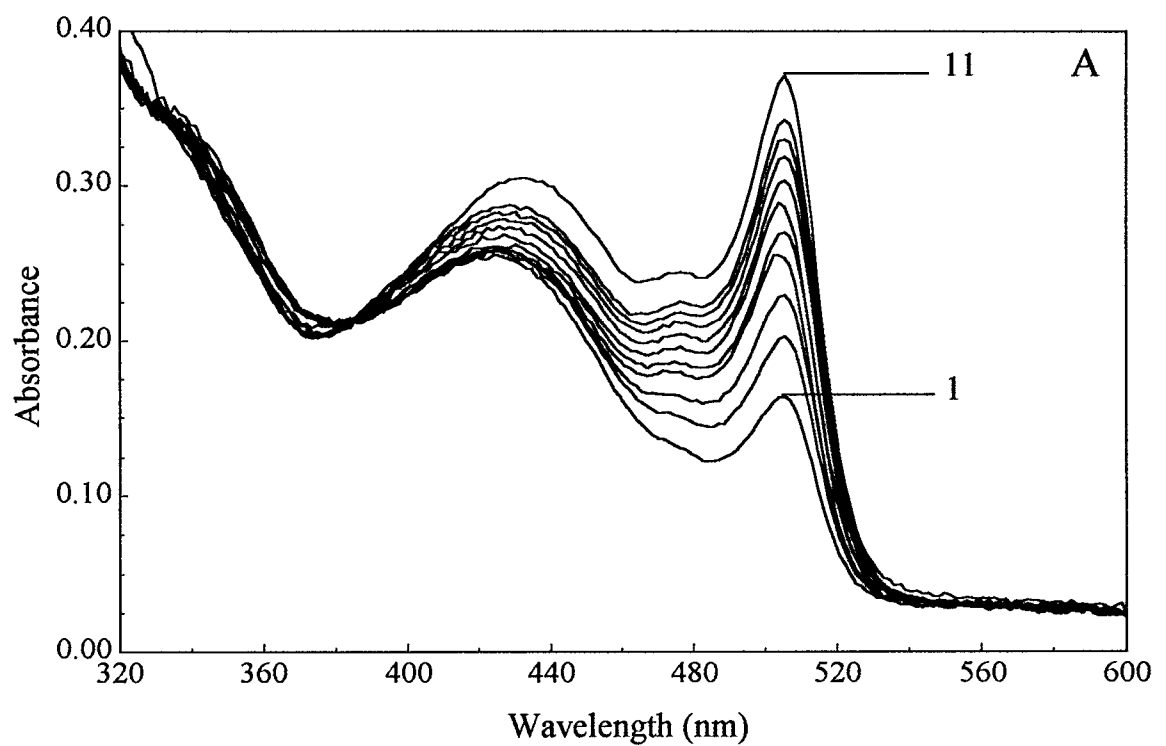


Figure 2

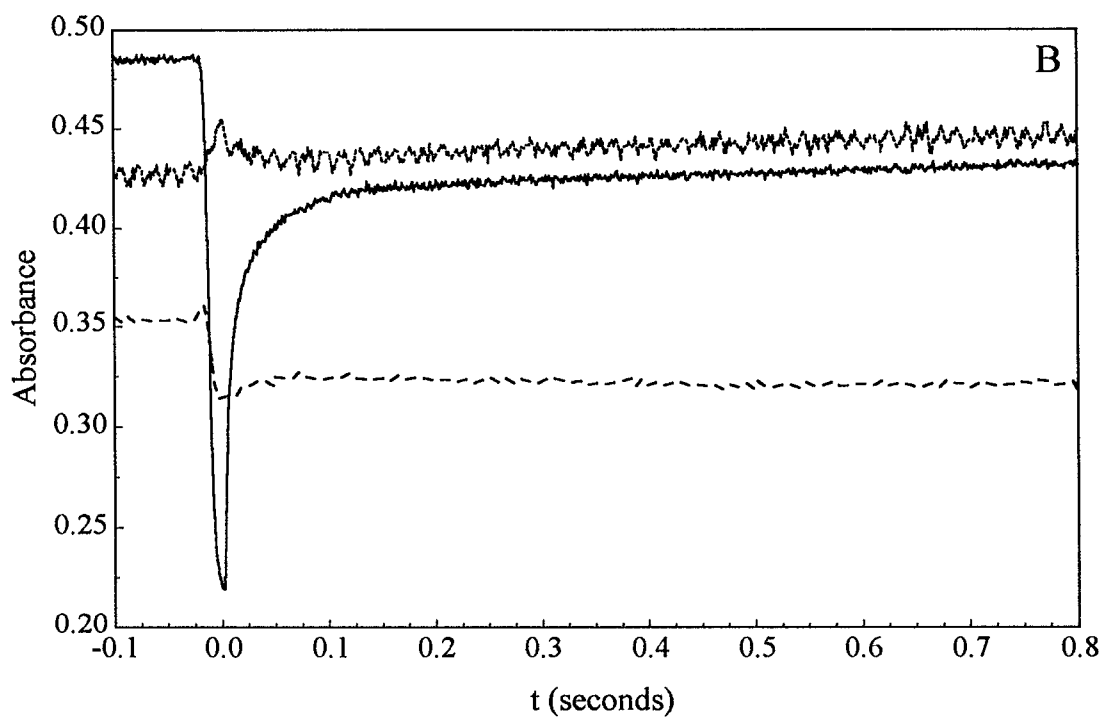
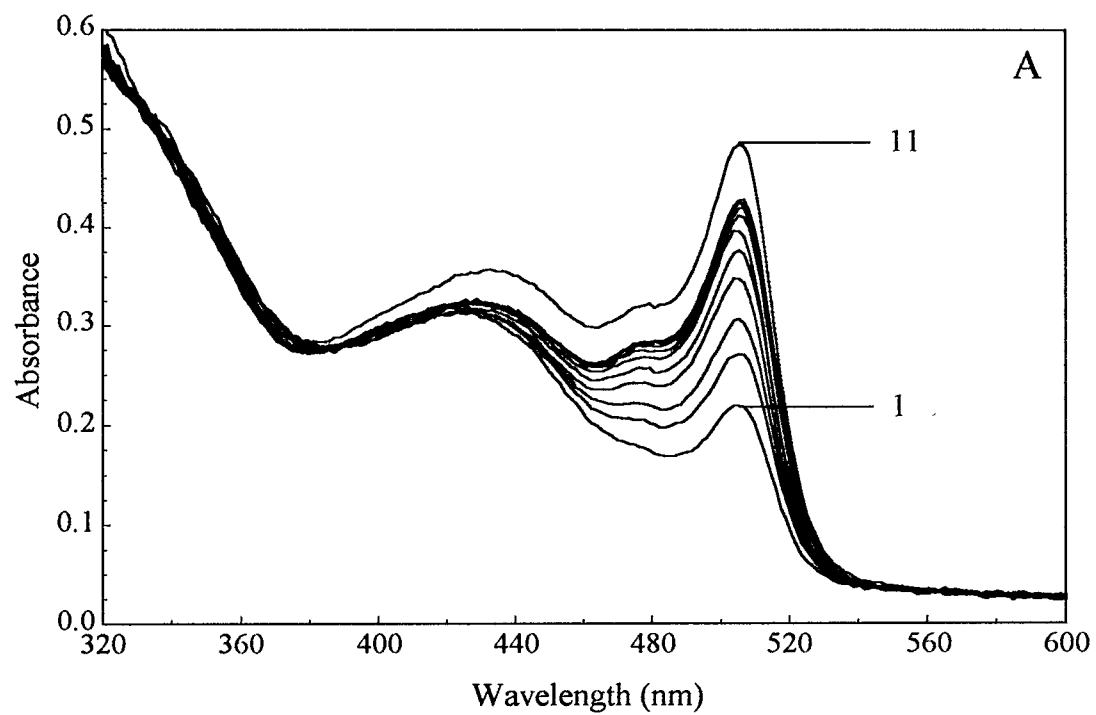


Figure 3

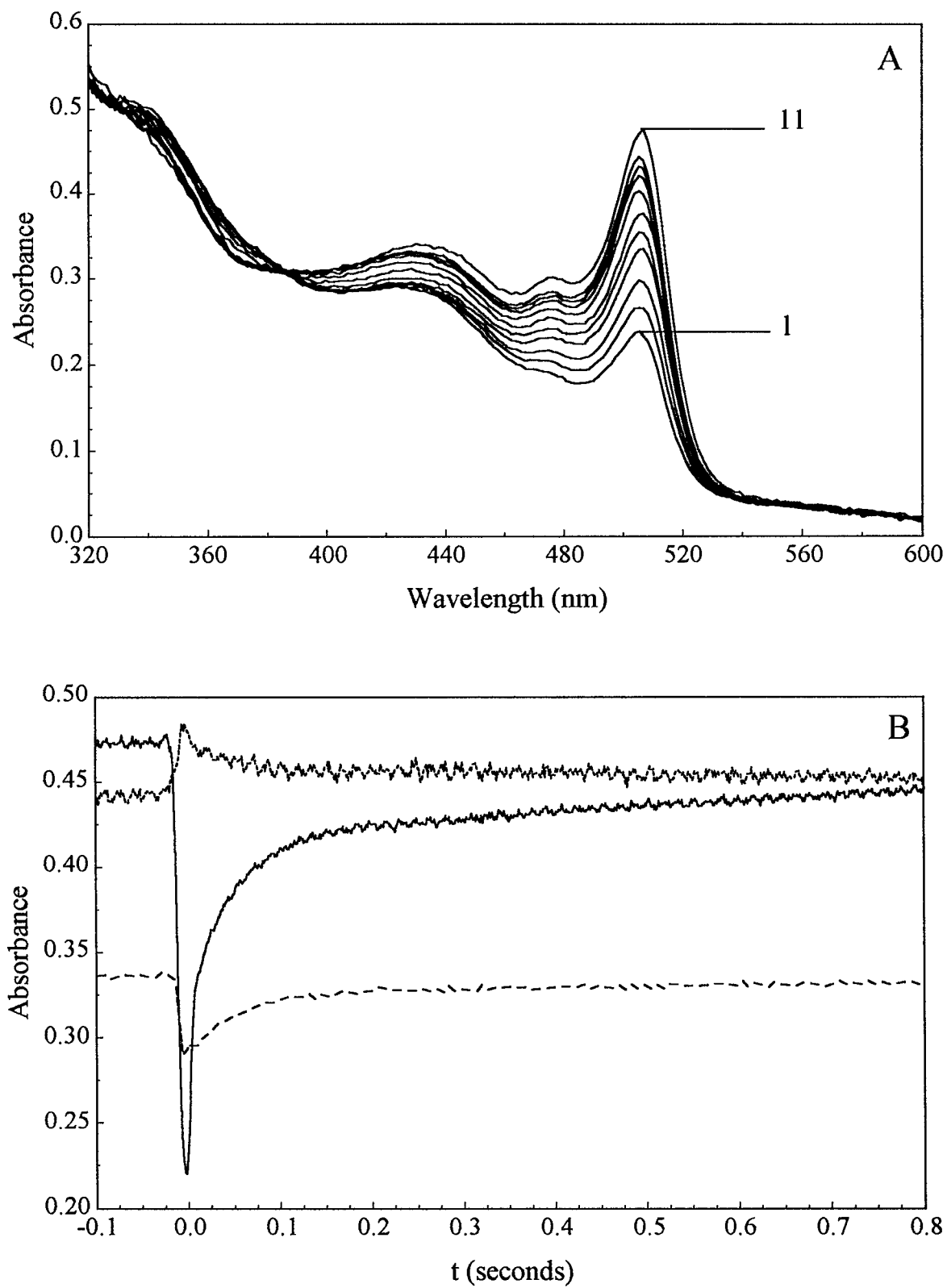


Figure 4

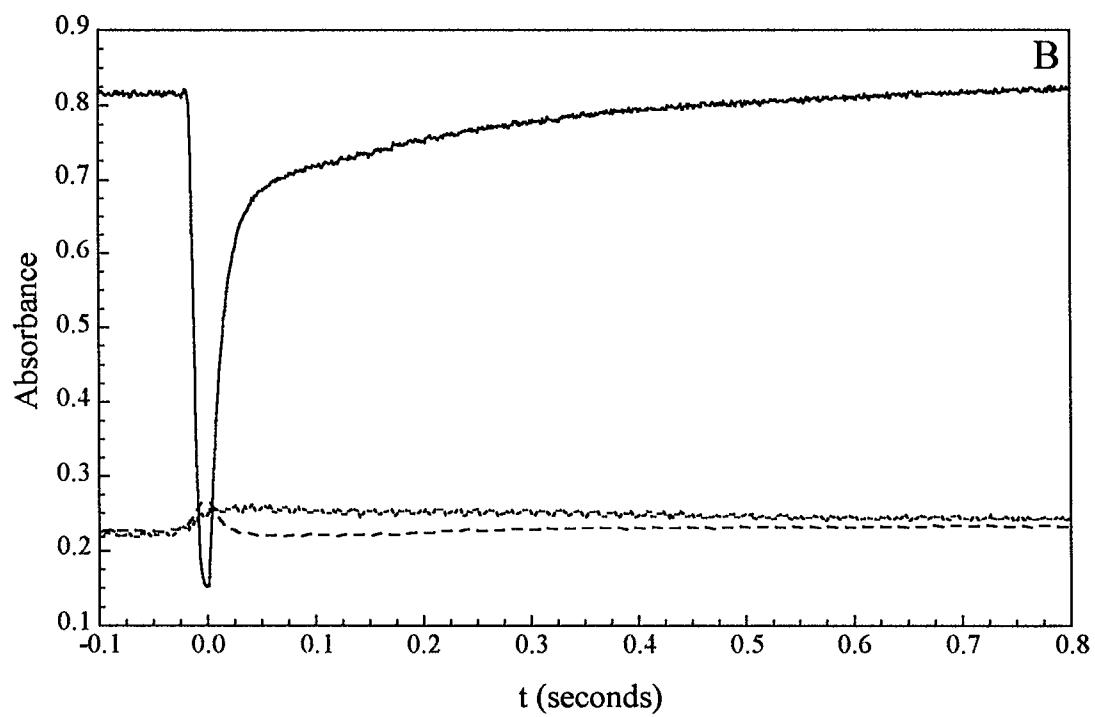
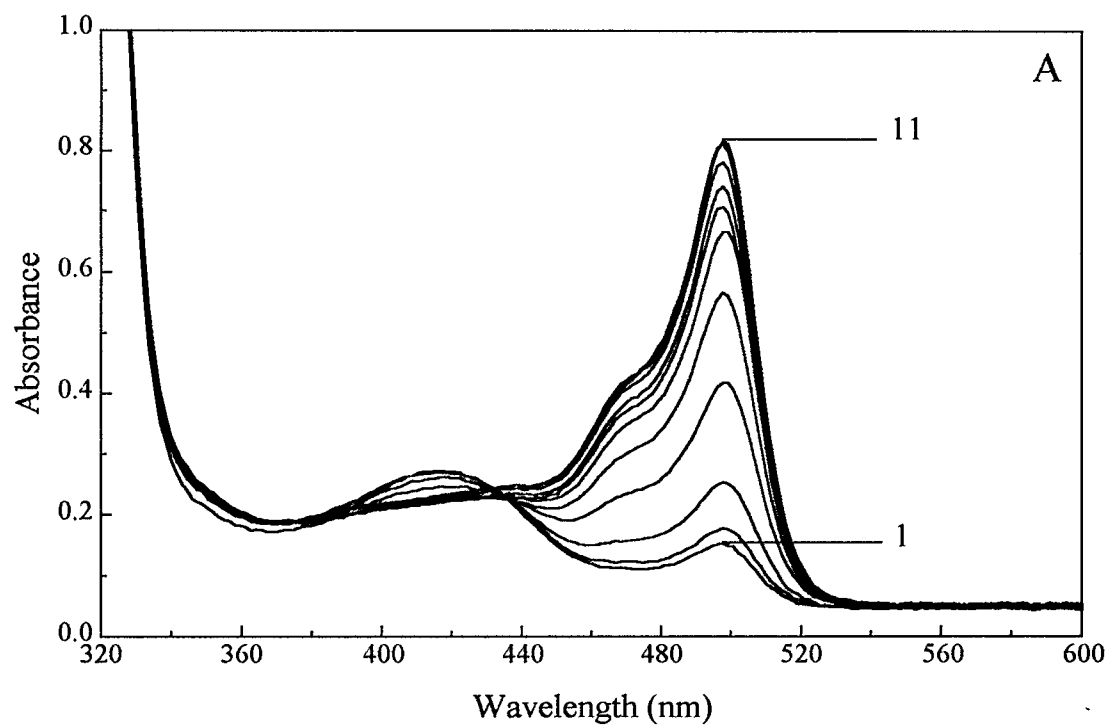


Figure 5

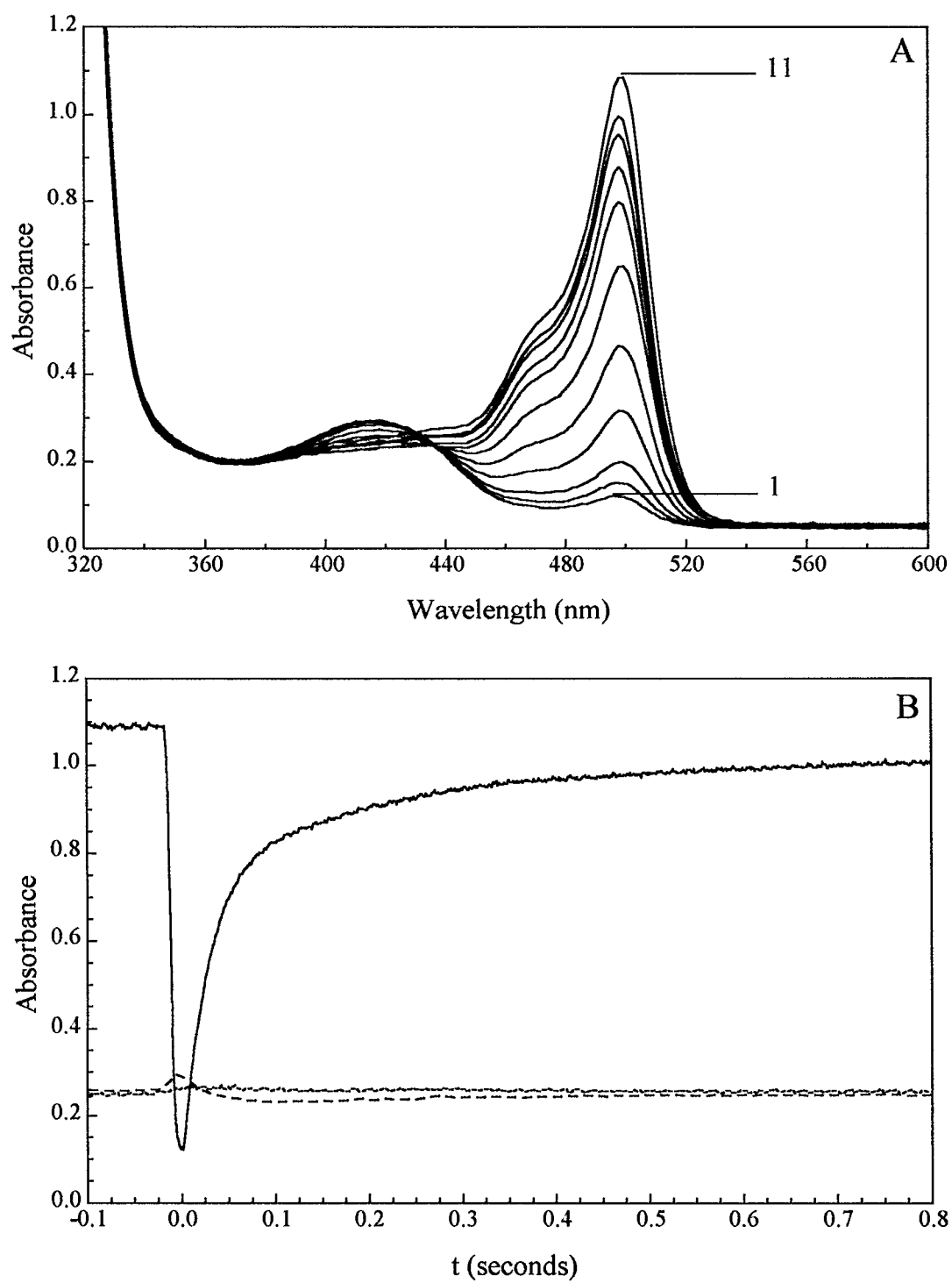


Figure 6

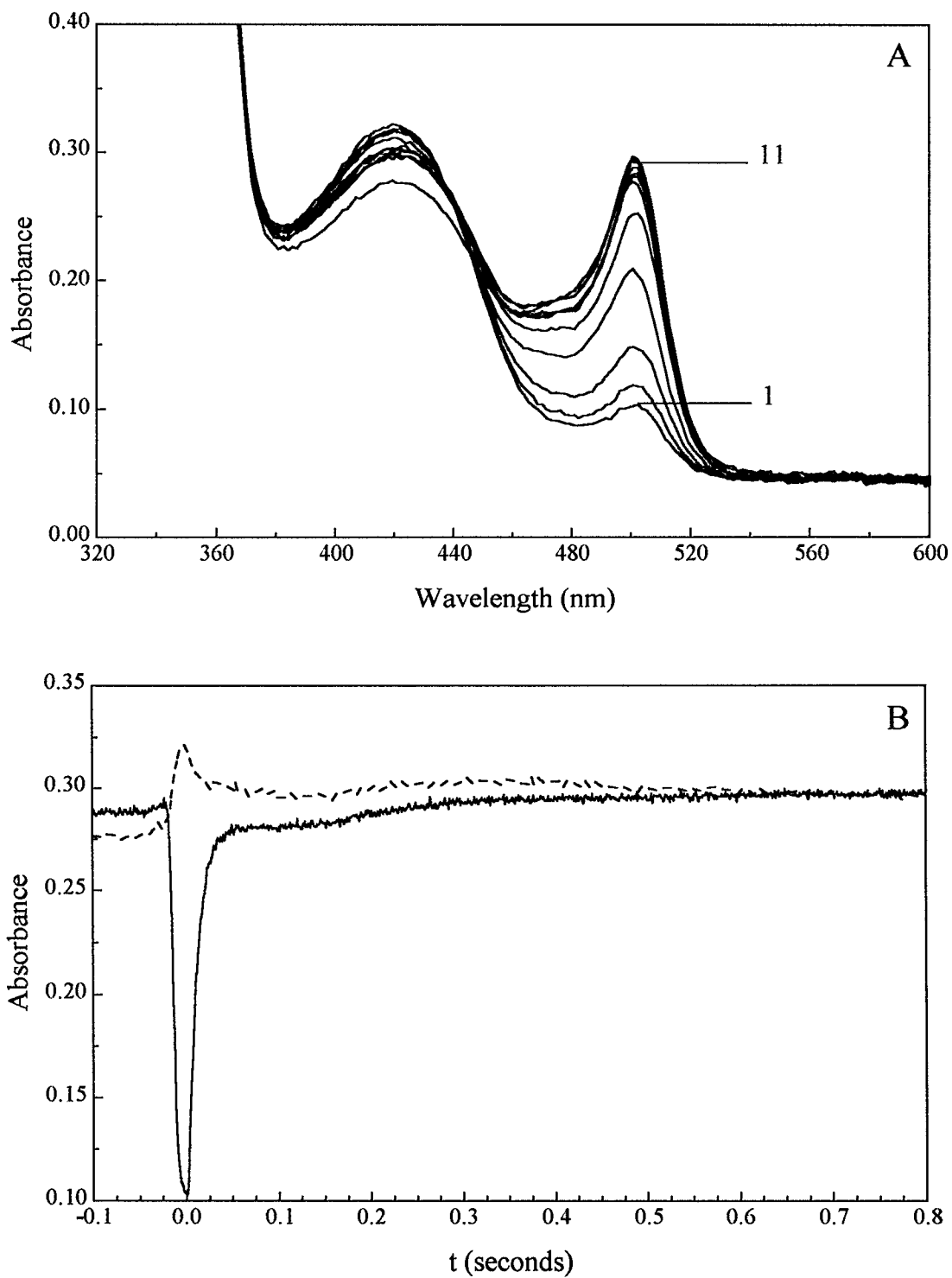


Figure 7

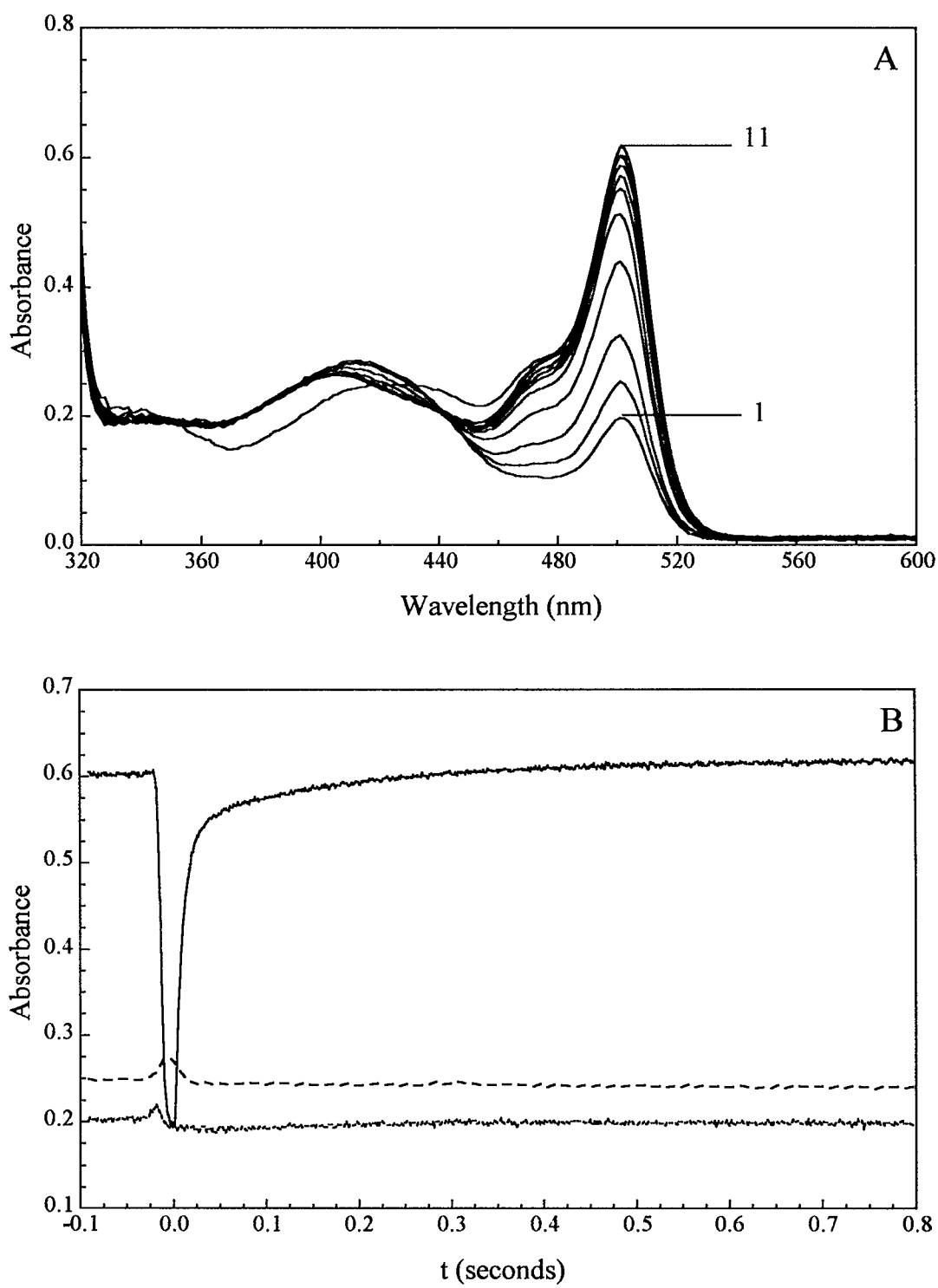


Figure 8

