

## Nitrile hydratase (NHT)

Cat. No. NHT-10    Lot. No. (See product label)

### SPECIFICATION

#### Product Overview

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>  | NHTs: a class of metalloenzyme, which selectively hydrate nitriles into the corresponding primary amide. They are widely used not only for the synthesis of amino acids, amides, carboxylic acids and their derivatives, but also for the preparation of chiral drugs.                                                                                                                                                                                                                                                           |
| <b>Applications</b> | 1. Normally, the reaction system should include substrate, buffer solution (optimum reaction pH) and NHT. 2. All the NHTs can be tested respectively in the reaction system above or with the NHT Screening Kit. 3. All kinds of NHTs corresponding to various optimum reaction conditions should be studied individually. 4. High concentration Substrate or product with may inhibit NHT's activity. However, the inhibition can be relieved by batch addition of substrate, coupling with the amidases or product extraction. |
| <b>Notes</b>        | Never contact with extreme conditions such as: high temperature, high/low pH and high concentration organic solvent.                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Storage</b>      | Keep 2 years below -20 centigrade.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Advantages</b>   | 1. High substrate specificity. 2. Strong chiral selectivity. 3. High conversion. 4. Less by-products. 5. Mild reaction conditions. 6. Environmentally friendly.                                                                                                                                                                                                                                                                                                                                                                  |

### GENE INFORMATION

 Tel: 1-631-559-9269    1-516-512-3133

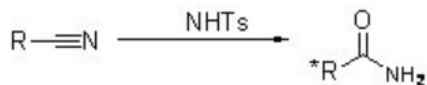
 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

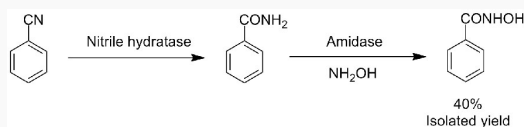
**Official Symbol** NHT

**Synonyms** Nitrile hydratase; NHT

**Catalytic reaction type**

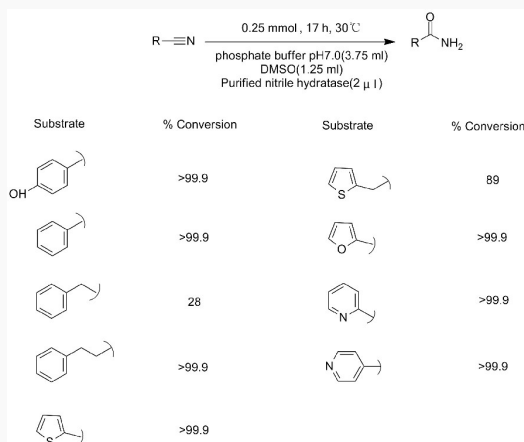


**Application Examples**



Coupling with the amidase

**Application Examples**



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