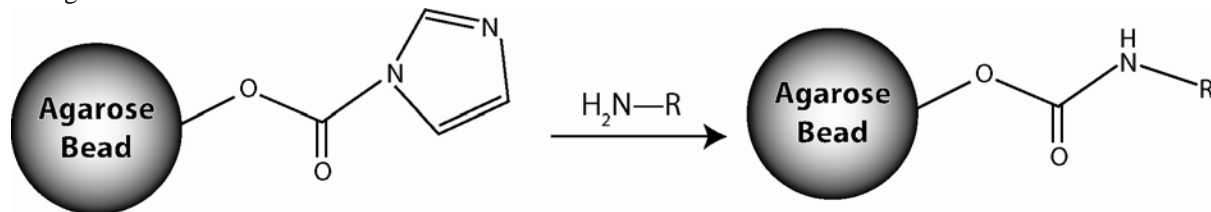


## CDI Amine Reactive Agarose

### INTRODUCTION

G-Biosciences CDI Amine Reactive Agarose consists of 6% cross-linked agarose activated with CDI (1,1'-carbonyl diimidazole) to form reactive imidazole carbamates. The activation of the resin occurs in solvent and to maintain its activity the resin is supplied in acetone to prevent hydrolysis. Upon reaction of the resin with primary amine containing molecules, i.e. proteins, in basic (pH8.5-10) aqueous buffers the imidazole carbamates lose the imidazole group and form carbamate linkages.



CDI Amine Reactive Agarose is ideal for immobilizing peptides, small organic molecules and certain proteins and reactions can occur in organic solvent making it ideal for water-insoluble ligands.

### ITEMS SUPPLIED

Cat. #	Description	Size*
786-404	CDI Amine Reactive Agarose	10ml resin

\* CDI Amine Reactive Agarose is supplied as a 50% slurry in acetone.

### STORAGE CONDITIONS

It is shipped at ambient temperature. Upon arrival, store refrigerated at 4°C, **DO NOT FREEZE**. This product is stable for 1 year at 4°C.

### SPECIFICATIONS

- Activation Level (Amine Coupling Efficiency): >50µmole/ml resin
- Fractionation Range: 10-4,000kDa for proteins
- Bead Structure: 6% cross-linked agarose

### IMPORTANT INFORMATION

- The resin is extremely moisture sensitive. Always allow the resin to warm to room temperature to prevent moisture condensing on resin and decreasing its activity. Limit exposure to air.
- Avoid buffers containing primary amines, i.e. Tris buffers. Use 10-100mM borate or carbonate buffer at pH8.5-11.
- Use 2-10mg protein/ml resin in a volume equal to resin bed volume.

### ADDITIONAL ITEMS

- Büchner funnel
- Whatman No.1 filter paper
- Protein solution (2-10mg for every 1ml resin)
- 50mM Tris, pH10
- PBS
- Columns (optional): G-Biosciences offers columns for a large range of resin volumes (Cat. # 786-718 to 786-724)



## PROCEDURE

1. **IMPORTANT:** Allow the resin and reagents to equilibrate to room temperature before opening. Avoid exposure to moisture.
2. Transfer an appropriate amount of resin to a Büchner funnel containing Whatman No.1 filter paper or sintered glass to remove the acetone.  
*NOTE: Alternatively, use an appropriate size, acetone resistant chromatography or spin columns to remove and wash away residual acetone..*
3. Immediately wash with 8-10 resin volumes of ice cold water. Do not allow resin to dry.
4. Combine the resin with the 2-10mg of protein for every ml of resin.
5. Incubate resin, with gentle mixing, at room temperature for 2 hours (pH11) to overnight (pH8.5-10). pH<10 requires longer incubation time for improved coupling.
6. Drain the coupling solution from the resin and
7. Add 50mM Tris buffer (pH10) to the resin and incubate for several hours to block the non-reacted CDI groups.
8. Drain the resin and wash with PBS or other suitable buffer.
9. Pack the resin in a column or other device for affinity purification.

## RELATED PRODUCTS

1. **Amine Coupling Resin** (Cat. # 786-066). *For the coupling of primary amine ligands through reductive amination.*
2. **SpinOUT™ Columns** (Cat. # 786-170 to 786-173, 786-703 to 786-708). *The SpinOUT™ GT-600 and GT-1200 columns are versatile, spin-format columns for the desalting and buffer exchange of protein solutions ranging from 5µl through to 4ml sample volumes.*
3. **Empty Columns** (Cat. # 786-718 to 786-727). *A selection of spin and gravity flow columns for small scale purifications.*
4. **Tube-O-DIALYZER™** (Cat. # 786-610 to 786-624) *Allows dialysis of small samples without having to take the sample out of the tube thus eliminates loss (Medi & Micro size available with 1kDa, 4kDa, 8kDa, 15kDa & 50kDa MW cut off limits).*

For related products, visit [www.GBiosciences.com](http://www.GBiosciences.com).

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