

Capillary Counterdiffusion Kits®

FOR PROTEIN CRYSTALLIZATION

The **Capillary Counterdiffusion Kits®** are the simplest and cleaver way to search for crystallization conditions.

- Only 300 nanoliters of protein solution per experiment.



- No pipeting, no drops, no grease.
- Each experiment is set in less than 30 seconds (measured).
- No handling of crystals: In situ X-ray characterization (proven with our glass capillaries).
 - Possible in situ full X-ray data collection for solving structure (demonstrated with our glass capillaries).

Each kit contains six GCB-Domino boxes filled with a precipitant solution or a mixture of precipitant buffered at six pH values. Just punch the 0.1 mm diameter capillaries filled with your protein solution. Counterdiffusion technique will do the work: an exhaustive testing of all precipitant concentrations at six different pH values and at different rates of development of supersaturation. In other words, Capillary Counterdiffusion will tell you everything about the crystallization behavior of your protein for a given precipitant or mixture of precipitants.

The same advantages of the Granada Crystallization Box (GCB) but now:

- The GCB-Domino boxes are filled with precipitant solutions. You do not need to prepare either the solutions or the gel.
- The volume of protein solution per experiment is now reduced down to 300 nanoliters.
- Our quality tested capillaries can be used for in situ X-ray diffraction data collection.
- The GCB-Domino boxes allow full visualization of the capillaries under microscope even when all the six boxes are located in their cardboard frame.

What you need to use the Capillary Counterdiffusion Kits:

- One Capillary Counterdiffusion Kit
- [Capillaries](#) (0.1 mm ID recommended)[**Enlace a los capilares**]
- Wax

Available Kits:

| Reference | Units per pack | Condition | pH | Price |
|-----------|----------------|-------------------|----|-------|
| KIT-SC-49 | 6 GCB-Dominó | Cloruro de Sodio | | |
| KIT-AS-49 | 6 GCB-Dominó | Sulfato de Amonio | | |
| KIT-SF-49 | 6 GCB-Dominó | Formato de Sodio | | |

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|-------------|--------------|---------|
| KIT-PEG4-49 | 6 GCB-Dominó | PEG 400 |
|-------------|--------------|---------|

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| KIT-PEG8K-49 | 6 GCB-Dominó | PEG 8000 |
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| KIT-PEG4K-49 | 6 GCB-Dominó | PEG 4000 |
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| KIT-PEG4Li-49 | 6 GCB-Dominó | PEG 4000 Li |
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| KIT-PEG448-49 | 6 GCB-Dominó | PEG 400 4000 8000 |
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| KIT-PEG448Li-49 | 6 GCB-Dominó | PEG 400 4000 8000 Li |
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|-----------|--------------|-------------------|
| KIT-SM-49 | 6 GCB-Dominó | Malonato de Sodio |
|-----------|--------------|-------------------|

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|-------------|--------------|------------------------|
| KIT-SFMg-49 | 6 GCB-Dominó | Formato de Sodio Mg Cl |
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We strongly recommend the use of the following capillaries with these kits:

□ Reference □

| Units per pack | ID (mm) | OD (mm) | Length (mm) |
|----------------|---------|---------|-------------|
| CP-01-50 | 25 | 0,1 | 0,17 |
| CP-01-40 | 25 | 0,1 | 0,17 |

Manual de uso de **Capillary Counterdiffusion Kits®**:



Optimization

- For users of structural genomics platforms.
- For improving the quality of crystals obtained by classical crystallisation techniques.

Let us know the crystallisation conditions found in your screening kits and our experts will prepare for you the capillary counter-diffusion kits needed to grow your crystals in capillaries. Easy and inexpensive. Just fill the form and send it to us.

As our experts study your form, you will receive the list of recommended prefilled GCBs to improve the crystal quality. Each crystallisation condition requires normally three GCBs. The price of one prefilled GCB is 14 €.

Optimization Form:



DataSheets and Formulations

☐☐☐ **DataSheets:**



[Data Sheet Capillary Counterdiffusion Kit Sodium Chloride](#)



[Data Sheet Capillary Counterdiffusion Kit Amonium Sulphate](#)



[Data Sheet Capillary Counterdiffusion Kit Sodium Formate](#)



[Data Sheet Capillary Counterdiffusion Kit PEG 400](#)



[Data Sheet Capillary Counterdiffusion Kit PEG 4000](#)



[Data Sheet Capillary Counterdiffusion Kit PEG 4000 Li₂ SO₄](#)



[Data Sheet Capillary Counterdiffusion Kit PEG 8000](#)



[Data Sheet Capillary Counterdiffusion Kit PEG 400 4000 8000](#)



[Data Sheet Capillary Counterdiffusion Kit PEG 400 4000 8000 Li₂ SO₄](#)



[Data Sheet Capillary Counterdiffusion Kit Sodium Malonate](#)



[Data Sheet Capillary Counterdiffusion Kit Sodium Formate Mg Cl₂](#)

□ □ **Formulations:**



[Formulation ALL Capillary Counterdiffusion Kit](#)



[Formulation Capillary Counterdiffusion Kit Sodium Chloride](#)



[Formulation Capillary Counterdiffusion Kit Amonium Sulphate](#)



[Formulation Capillary Counterdiffusion Kit Sodium Formate](#)



[Formulation Capillary Counterdiffusion Kit PEG 400](#)



[Formulation Capillary Counterdiffusion Kit PEG 4000](#)



[Formulation Capillary Counterdiffusion Kit PEG 4000 Li₂ SO₄](#)



[Formulation Capillary Counterdiffusion Kit PEG 8000](#)



[Formulation Capillary Counterdiffusion Kit PEG 400 4000 8000](#)



[Formulation Capillary Counterdiffusion Kit PEG 400 4000 8000 Li₂SO₄](#)



[Formulation Capillary Counterdiffusion Kit Sodium Malonate](#)



[Formulation Capillary Counterdiffusion Kit Sodium Formate Mg Cl₂](#)

Custom-made Kits:

We also offer the possibility to order your own Capillary Counterdiffusion Kit with the conditions you need. Just send us an email to triana@trianatech.com with the conditions you need or from the menu "orders" and we will prepare a Kit with such conditions.

References

1. J.M. García-Ruiz, Counterdiffusion Methods for Macromolecular Crystallization. Methods in Enzymology, Vol. 368 (2003) 130-154.