Clontech TALON

創意集點GO

蛋白質純化

- ☐ For His - Tag Protein
- ☑ For GST - Tag Protein
- ☑ For Immunoglobulin
- ☐ For Phosphoprotein
- ☐ For Glycoprotein

For GST Tag

GST (glutathione-S-transferase) 為胞內酵素，與 glutathione 有很高的親合力，利用 glutathione crosslinked resin 即可將 GST tag 的蛋白純化出來。Clontech 推出三種產品可供選擇：

1. Glutathione-Uniflow：小量使用 (流速 2 ml/cm2/min)
2. Glutathione-Superflow: FPLC 專用 (流速 15ml/cm2/min)
3. GST Purification Kit: 方便包。內含五管 Pre-packed Glutathione-Uniflow column, 及所需的 Buffer

貨號	產品	包裝	特 價
635607	GLUTATHIONE SUPERFLOW RESIN	10ml	8216
635610	GLUTATHIONE UNIFLOW RESIN	10ml	7482
635619	GST PURIFICATION KIT	5 Preps	15193

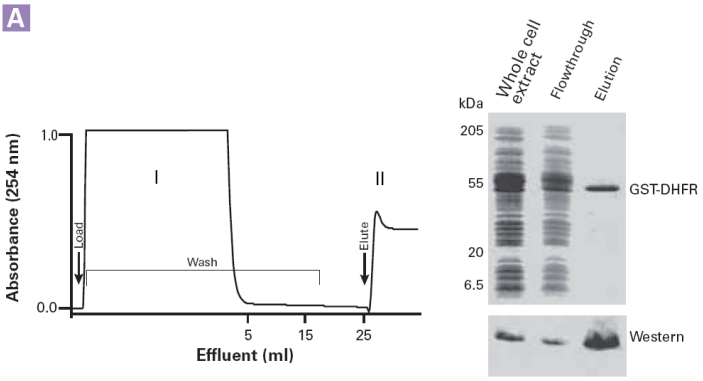
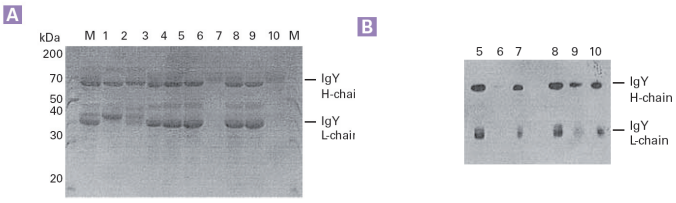


Figure 30. GST-tagged protein purification from whole cell extract. Whole cell extracts containing GST-DHFR (Panel A) was loaded, washed and eluted from glutathione resin columns. Then, the resulting purifi cation fractions were analyzed by SDS-PAGE (upper panels) and Western blot (lower panels) with an anti-GST

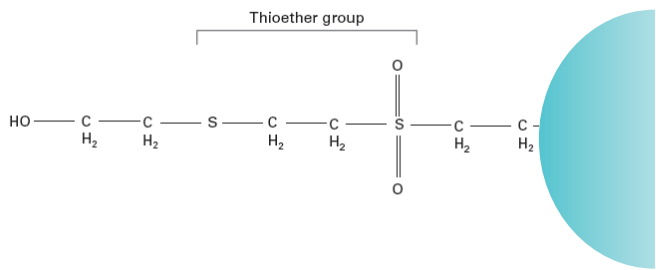
For Immunoglobulin

Protein A resin 是最常用來純化抗體的方式，但有許多抗體如 IgE、IgY、IgM 等，是無法用 Protein A 進行純化的，因此1894 年 Porath 等人發明的 Thiophilic absorption chromatography (TAC) 成為純化這些抗體的最好方法。TAC 與 Ig 及 α 2-Macroglobulin 有高親合性，且與 Protein A 不同的是，Thiophilic resin 在中性環境下就能 Elute 出來 (Protein A Elution 條件在酸性環境下)，更能確保蛋白的活性。

1. 廣泛選擇性純化：能純化 IgE、IgM、IgY 和 IgG
2. 純化 Single-chain 的抗體
3. 高回收率
4. 中性環境純化
5. Flow rate 高達 5 cm/min



Structure of Thiophilic resin



貨號	產品	包裝	特 價
635613	THIOPHILIC UNIFLOW RESIN	10ml	6747
635616	THIOPHILIC SUPERFLOW RESIN)	10ml	6472

Figure 34. Purification of IgY from chicken egg using Thiophilic Resin. Panel A. SDS-PAGE analysis of fractions from purifi cation of chicken egg immunoglobulins. In lanes 7 & 10, 10 mg of protein was loaded, and all other lanes, 25 mg was loaded. Lane 1: supernatant of egg yolk extract. Lane 2: supernatant after 60% SAS (Saturated concentration of Ammonium Sulfate). Lane 3: Wash with 60% SAS. Lane 4: Pellet after 60% SAS. Lane 5: column load. Lane 6: unbound material. Lane 7: eluted material.Lanes 8 - 10: purifi cation using another type of thiophilic resin.Panel B. Immunoblot of Panel A results. One tenth of the materialof the gel in panel A was loaded, then immunoblotted. The IgY was detected with polyclonal rabbit anti-chicken HRP-conjugate. M=molecular