

Recent patent applications in protein purification

Patent #	Subject	Assignee(s)	Inventor(s)	Priority application date	Publication date
WO 2007080504	A method for developing a tissue proteome library comprising synthesizing the total cDNA pool from an mRNA, transforming the plasmid pool into bacteria by electroporation, growing and inducing the bacterial culture for protein expression, isolating the expressed proteins, resolving isolated proteins and identifying individual proteins and expression levels of total proteins obtained.	Council of Scientific and Industrial Research (New Delhi)	Murthy SB	1/12/2006	7/19/2007
JP 2007176831	A method for producing useful protein, e.g., cytokine, by dissolving silk thread capable of expressing useful protein by a modified gene method in a solubilizing agent and collecting useful proteins from the supernatant liquid after precipitating fibroin. The method enables efficient, convenient production of proteins with sufficient purity in large quantities without performing complicated purification processes.	Toray Industries (Tokyo)	Morita K, Tanaka T	12/27/2005	7/12/2007
WO 2007038746, US 20070092943	A versatile broad host-range heterologous protein expression vector comprising a promoter nucleic acid sequence operable in a photosynthetic bacteria, a nucleic acid sequence encoding an extended purification tag, a cloning cassette comprising a multiple cloning site and a selection marker to select in the photosynthetic bacteria.	University of Chicago (Chicago)	Hanson DK, Laible PD	9/28/2005	4/5/2007, 4/26/2007
RU 2297424	A method for recombinant protein purification, including the application of nanoparticles of bivalent metals having a particle diameter of 20–100 nm. Recombinant protein binding is carried out directly in coarse cell lysates, and particle separation from nonbonded proteins is carried out by using magnetic separation.	Govorun VM, Kuskov ML, Lazarev VN, Leypunskii IO, Nikolaev EN, Zhigach AN	Govorun VM, Kuskov ML, Lazarev VN, Leypunskii IO, Nikolaev EN, Zhigach AN	11/28/2005	4/20/2007
JP 2007078595	Functional particles for trapping, recovering and purifying bioactive substances (e.g., antibodies and enzymes) consisting of a core material portion, at least one magnetic layer comprising a magnetic or nonmagnetic particle and a noble material layer.	Hitachi Maxell (Tokyo)	Arai S, Daimon H, Okado H	9/16/2005	3/29/2007
EP 1764414, WO 2007031339	New recombinant viral particles or recombinant virus-like particles comprising fusion protein molecules; useful in purifying a protein of interest.	Icon Genetics (Munich)	Gleba Y, Klimyuk V, Marillonnet S, Werner S	9/17/2005	3/21/2007, 3/22/2007
WO 2006138737	A method of purifying a β -amyloid protein (A- β) binding protein having an Fc region from a source liquid comprising the protein and one or more impurities, comprising adsorbing the A- β binding protein to an Fc binding agent.	Wyeth (Madison, NJ, USA), Neuralab (Worcester, MA, USA)	Godavarti R, Iskra T	6/17/2005	12/28/2006
JP 2006327991	A method of purifying recombinant protein, involving affinity chromatography using a chromatography carrier containing at least the sulfuric ester or by using cation exchange chromatography and then affinity chromatography using a chromatography carrier containing at least the sulfuric ester.	Nippon Zenyaku Kogyo (Koriyama, Japan)	Miyake M	5/26/2005	12/7/2006
US 20060263855	A fusion protein comprising a product protein domain, self-cleaving intein and at least one aggregator protein domain capable of self-associating and precipitating one or more elastin-like protein (ELP) domains, where the intein is located between the product protein domain and the aggregator protein domain; useful for the purification of recombinant proteins.	Banki MR, Wood DW	Banki MR, Wood DW	3/14/2005	11/23/2006
WO 2006110277	Improved purification of a protein mixture to isolate proteins (e.g., antibodies and immunoadhesins) involving subjecting the mixture to ion-exchange chromatography and hydrophobic charge-induction chromatography.	Medarex (Princeton, NJ, USA)	Arunakumari A, Ferreira GMM	4/11/2005	10/19/2006
WO 2006108826	Purifying recombinant proteins expressed in eukaryotic or prokaryotic host cells, comprising using a highly basic protein from thermophilic bacteria as a purification tag of the recombinant protein in a cation-exchange chromatography purification step.	Novo Nordisk (Bagsvaerd, Denmark)	Bang S, Shaw AC, Su J	4/15/2005	10/19/2006

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