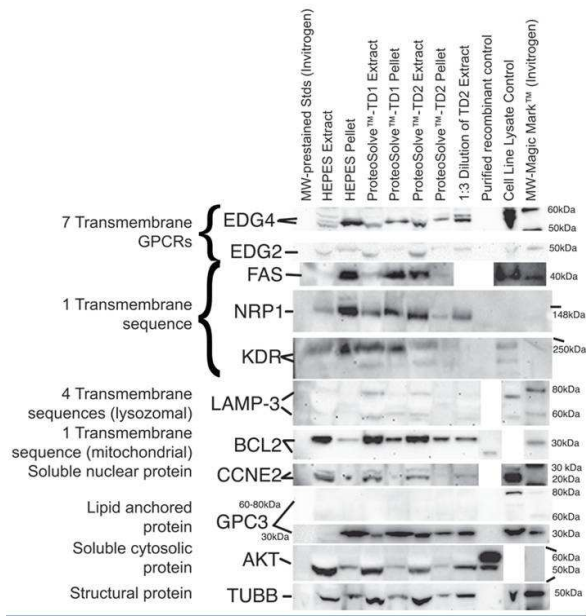


ProteoSolve-TD2

A Pressure-Enhanced Kit for the Extraction and Solubilization of Integral Membrane Proteins from Recalcitrant Tissues and Solid Tumors

Integral membrane proteins play key biological roles in cell signaling and transport, as well as in pathogen invasion. However, serious proteomic study and characterization of this class of proteins has often been limited to serum-soluble extracellular fragments or their proteolytic peptides. **ProteoSolve-TD2**, in combination with pressure cycling technology (PCT), facilitates recovery of intact membrane proteins from solid tumors and other tissues when proteins are not efficiently extracted by **ProteoSolve-TD1**. **ProteoSolve-TD2** operates in a solvent-free buffer system that is directly compatible with most subsequent proteomic analyses (2-D gels, SDS-PAGE gels, liquid chromatography, antibody assays, and mass spectrometry). The **TD2 Buffer** also recovers soluble cytosolic proteins to provide a more complete representation of the cellular proteome than can be achieved by other methods.



Western blots were used to determine recovery in each reagent system. Equal starting tumor amounts of post-extraction supernatants and pellets were heated in 4x SDS-PAGE sample buffer before loading on a gel. Antibody controls (cell lines and recombinant proteins, where available) are also shown. ProteoSolve TD1 and TD2 were significantly more effective for recovery of most of the membrane proteins tested than HEPES buffer at the same extraction conditions.

TD2 Membrane Protein Extraction Reagent* is licensed for **Research Use Only** from Target Discovery, Inc.

Features & Benefits:

- A Kit for the Extraction and Solubilization of Integral Membrane Proteins from Recalcitrant Tissues and Solid Tumors
- Use the Synergy of Pressure, Chemistry and Mechanical Force to Optimize Yield
- Operates in a Solvent-Free Buffer System that is Directly Compatible with Most Subsequent Proteomic Analyses (2-D Gels, SDS-PAGE Gels, Liquid Chromatography, Antibody Assays, and Mass Spectrometry)
- TD2 Buffer Also Recovers Soluble Cytosolic Proteins to Provide a More Complete Representation of the Cellular Proteome than Other Methods

Specifications of the ProteoSolve-TD2

TD2 Membrane Protein Extraction Reagent*	1 Vial 18 mL	Storage Conditions	4°C
Dispersion Aid	2 Ampoules	Storage Conditions	4°C
Silicon Carbide (SiC) Abrasive	1.2 grams	Storage Conditions	RT
Shredder PULSE Tubes	12 Complete Assemblies	Additional Equipment Required	Barocycler NEP 3229 or NEP 2320
User Manual	1 Each	Additional Equipment Recommended	<i>The PCT Shredder</i>

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Not for Use in Diagnostic Procedures

Note: The ProteoSolve-TD2 Kit works in conjunction with PBI's pressure generating Barocyclers and *The PCT Shredder*. Both Barocyclers and *The PCT Shredder* are sold separately.

References:

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3. Abraham, G. and Colonno, R.J., "Many rhinovirus serotypes share the same cellular receptor," *J. Virol.*, 51:340-345 (1984).
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5. Burness, A.T.H., Glycophorin and sialylated components as receptors for viruses," in" *Virus receptors, part 2*, pp64-84, Lonberg-Holm, K. and Phillipson, L., eds., (Chapman and Hall, London, 1981).
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