THE HEBREW UNIVERSITY OF JERUSALEMהאוניברסיטההעבריתהאוניברסיטההעבריתדוש PROTEIN PURIFICATION UNITהיחידה לניקוי חלבוניםTHE WOLFSON CENTRE FORמרכז וולפסון

THE WOLFSON CENTRE FOR APPLIED STRUCTURAL BIOLOGY

. ליישומי ביולוגיה מבנית

Dr. Mario Lebendiker Phone: 972-2-6586920 – <u>mario.l@mail.huji.ac.il</u>

Protein Information Submission Form

P.I. name:Contact Person:Affiliation:Address:E-mail address:Phones:Name of protein/s:

Dear customer, please fill in this form as thoroughly as possible. The more information, the better we could perform the expression/purification tasks.

KNOWN DATA – DETAILED INFORMATION LIST Protein Name: Gene identification number and link to SwissProt info sheet: Entry number in PDB Origin / Species: Known Protein Function: Molecular Weight (kDa): pl (https://web.expasy.org/protparam/): Absorption Coefficient in Abs 0.1% (=1 g/l) (https://web.expasy.org/protparam/): Oligomeric state monomer, dimer, etc:

Amino acid sequence (use different colors for the tag, the protease cleavage site and the target protein):

Possible post translational modifications (glycosilation, phosphorilation, others) and positions:

Forms Complex with:

Number of Cystein residues (requires/sensitive to reducing agents):

Known/putative disulphide bridges (+ position):

Temperature Stability:

pH stability range (buffer) :

Required salt concentration in the sample (Salt type and Salt range stability):

Solvent resistant protein:

Requires/sensitive to detergents:

Requires/sensitive to chelating reagents (EDTA, EGTA, etc):

Requires/sensitive to divalent cations:

Requires co-factors, ligands, etc :

Known tendency to form aggregates (VERY IMPORTANT):

Important information, like: protease sensitive, glycosilation or phosphorilation needs, others:

Literature (publications where same or similar protein was purified):

PRELIMINARY EXPERIMENTAL RESULTS

Expression (mark x in appropriate box)

- □ Expression in bacteria
- □ Expression in insect cells
- □ Expression in mammalian cells
- \Box Cell free expression
- □ Natural (non-recombinant). Source:

Vector name, maker, map and sequence

Fusion partner information and localization (N/C term)

Expression profile PAGE-SDS (Coomassie stain, Western blot, etc.). Include cell lysis protocol: procedure, lysis buffer, and purification. *Show SDS-PAGE results*

Cellular localization during expression (Cytoplasmatic, Extracellular, Membrane Bound / Associated, Inclusion Bodies, Periplasmic, etc):

Activity assay (method and results)

History / Failures of purification

Known aggregation tendency from the literature or personal experience (like expression as inclusion bodies in many expression conditions, or turbidity after Ni purification, or protein lost during purification or concentration, others):

REQUIRED PROCESSES AND APPLICATIONS

Intended use of the protein (very important: remark needs of sterility, endotoxin free, others)

Final production scale - Quantity you need or for each application:

Required purity (therapeutic, very high, high, partially pure, other):

Other requirements (buffer/co-factors/detergents/etc/)

Preliminary scale (initial growth volume):

Suggested cell lysis procedure (French Press, sonication, etc.):

Suggested lysis buffer (buffer, pH, salts, detergent, co-factors, protease inhibitors, etc.):

Suggested purification buffer (buffer, pH, salts, detergent, co-factors, protease inhibitors, etc.):

Suggested storage buffer (buffer, pH, salts, detergent, co-factors, protease inhibitors, etc.):

Suggested storage conditions (temperature, aliquots, etc):

Other available information