

VDAC1 – Voltage-Dependent Anion Channel 1

Product specification

Acronym: VDAC1

Origin species: Human

Protein reference : P21796 (UniProtKB)
L06132.1 (GenBank)

Family: Anion channel

Expression system: E.coli based CFPS

Format: Proteoliposomes

Protein sequence: Met1 - Ala283

Tag : Histidine tag fused to the N-terminal end of the protein

Cleavage site: Factor Xa

Product MW: 30,7kDa

Application: Drug screening & discovery, antibody development, structural biology

Product description

VDAC-1 (Voltage-Dependent Anion Channel) is a mitochondrial porin located in the outer mitochondrial membrane (OMM). This protein consists of a transmembrane β -barrel with a N-terminal α -helix. VDAC is responsible for the exchange of adenine nucleotides, Ca^{2+} and other metabolites across the mitochondrial membrane. It also has binding sites for glycerol, hexokinase II, creatine kinase and Bcl-2 family members. VDAC plays a central role in the increase of mitochondrial membrane permeability as part of apoptosis.

Recombinant protein sequence

His tag – factor Xa cleavage site-

MSGFHSHHHSSGIEGRGLIKHMAVPPTYADLGKSARDVFTKGYGFGLIKLDLKTSENGLEFTSSGSANTETTKVTGSLETKYRWTEYG
LTFTEKWNTDNTLGTEITVEDQLARGLKLTDFDSSFPNTGKKNKIKTKYKREHINLGCMDMDFDIAGPSIRGALVLGYEGWLAGYQMNFFET
AKSRVTQSNFAVGKYKTDEFQLHTNVNDGTEFGGSIYQKVNKKLETAVNLAWTAGNSNTRFGIAAKYQIDPDACFSKVNNSLIGLYTQT
LKPGIKLTLALLDGKNVNAGGHKLGLEFQA

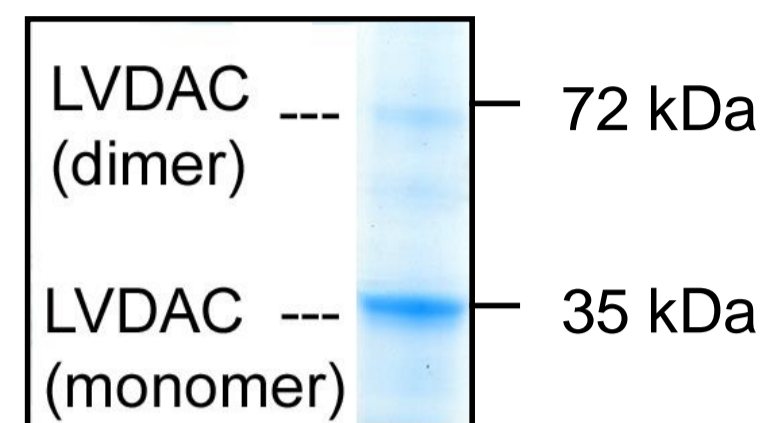


Quality analysis

Purity: Typically > 75 % as determined by SDS-Page and Coomassie staining.

Purification procedure : VDAC proteoliposomes are purified on a sucrose gradient. Additional purification can be performed if required.

Fig.1: VDAC proteoliposomes after purification (Coomassie Blue).



Formulation

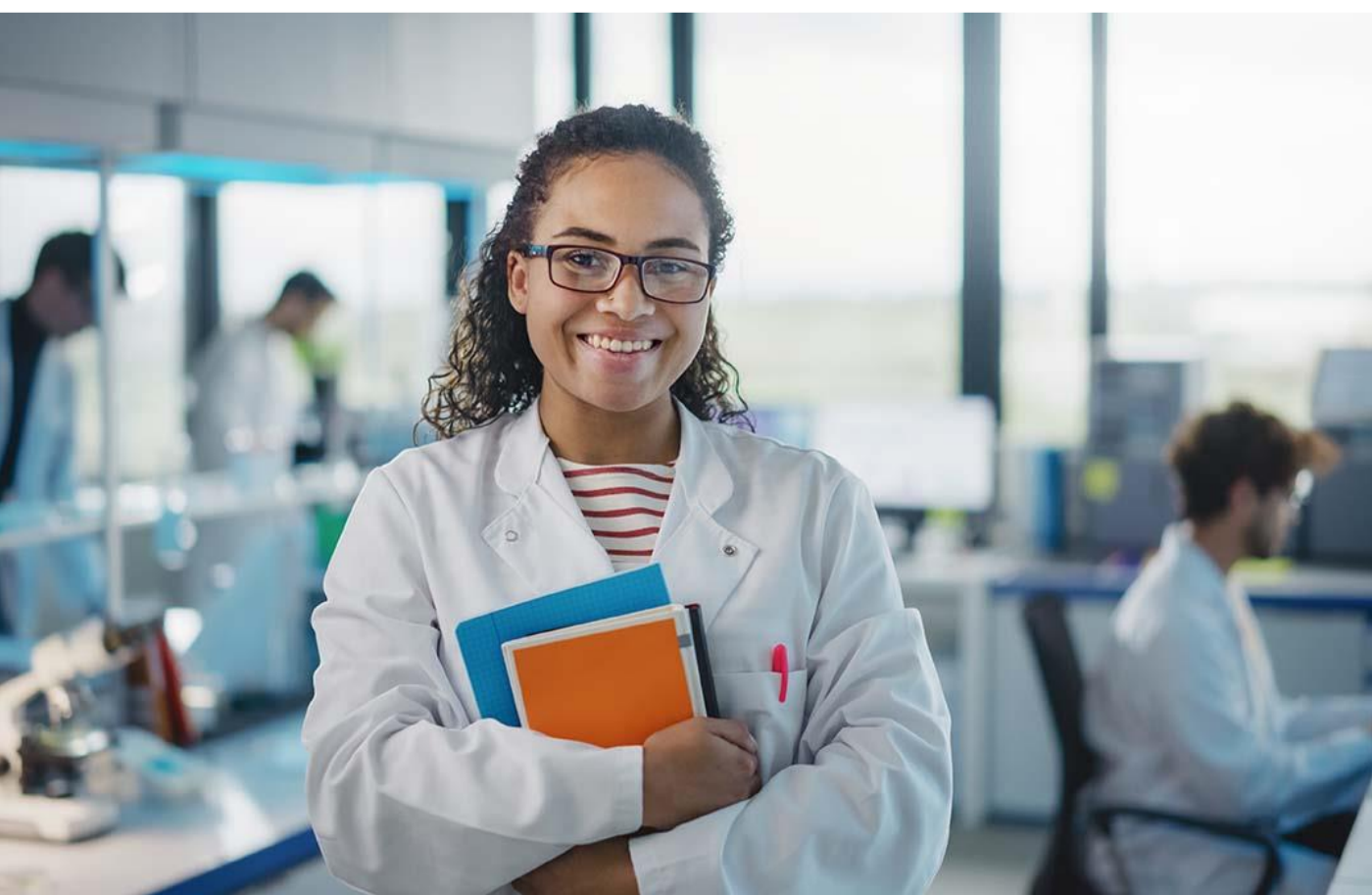
Buffer: Available in Tris 50mM, pH 7.5. Other buffers or customized formulation can be provided upon request.

Customized Hydrophobic matrix: Customized formulation with specific lipids like PEGylated or biotinylated lipids can be used upon request, as well as targeting molecules.

Storage/Stability: Store at +4°C for up to one week or several months at -80°C. Aliquot for storage.
Do not freeze-thaw after aliquoting.

Use restrictions: For life science research use only.

Available sizes: 10µg, 20µg, 100µg, 200µg, 500µg - higher quantity on request.



Need a specific amount, a quote or any additional information?
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Synthelisis

T : +33 (0)4 76 54 95 35
E: contact@synthelisis.fr
www.synthelisis.com

