
MATERIAL DATA SHEET

Recombinant Human His6 USP9x Isoform 2**Cat. # E-552**

Ubiquitin Specific Peptidase 9, X-linked (USP9x), also known as DFFRX, FAF, and FAM, is a cytoplasmic protein that belongs to the peptidase C19 family of deubiquitinating enzymes (1,2). It is 2570 amino acids (aa) in length with a predicted molecular weight of 292.3 kDa. Human USP9x shares 98% aa sequence identity with the mouse and rat orthologs. USP9x contains a catalytic domain located between aa 1531 and 1971 and a Ubiquitin-like domain that is located at aa 873-963 (3). It is widely expressed and has been shown to interact with and deubiquitinate multiple substrates. Some putative targets include β -Catenin, TOR, Synuclein- α , the Ubiquitin ligases (E3s) Itch, MARCH7, and SMURF1, and the MAP kinase kinase kinase ASK1 (4-10). USP9x has also been shown to control the activity of the AMPK-related kinases ARK5 and MARK4 through direct removal of Lys29- and Lys33-linked Ubiquitin chains (3). It has also been shown to promote cell survival by deubiquitinating and stabilizing the anti-apoptotic protein Mcl-1, and to regulate chromosome alignment and segregation during mitosis by deubiquitinating the chromosome passenger protein Survivin (11-13). Additionally, USP9x appears to promote TGF- β signaling via deubiquitination of mono-ubiquitinated Smad4 (14). USP9x expression has been shown to be correlated with several cancer types (11,15,16). This recombinant human protein contains an N-terminal His₆-tag.

Product Information

Quantity:	25 μ g
MW:	291 kDa
Source:	<i>Spodoptera frugiperda</i> , Sf21 (baculovirus)-derived Contains an N-terminal Met and 6-His tag Accession # NP_001034680
Stock:	X mg/ml (X μ M) in 50 mM HEPES pH 7.5, 100 mM NaCl, 10% Glycerol (v/v), 5 mM DTT
Purity:	>85%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage

Use: Recombinant Human His6-USP9x-2 is a Ubiquitin-specific deconjugating enzyme. Reaction conditions will need to be optimized for each specific application. We recommend an initial Recombinant Human His6-USP9x-2 concentration of 0.05-0.5 μ M.

Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 6 months from date of receipt, -70 °C as supplied.
- 3 months, -70 °C under sterile conditions after opening.

Literature

References:

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