

Rabbit Anti-UBE2A antibody

SL8375R

Product Name:	UBE2A
Chinese Name:	Ubiquitin结合酶E2蛋白A抗体
Alias:	BHR6A; hHR6A; mHR6A; mHR6A; RAD6 homolog A; RAD6A; RAD6B; UBC-1; UBC2; UBC6; UBCD6; UBE2A; UBE2A_HUMAN; UBE2B; Ubiquitin carrier protein A; Ubiquitin carrier protein; Ubiquitin conjugating enzyme E2 17 kDa; Ubiquitin conjugating enzyme E2 A; Ubiquitin protein ligase A; Ubiquitin-conjugating enzyme E2 A; Ubiquitin-conjugating enzyme E2-17 kDa; Ubiquitin-conjugating enzyme E2-21.5 kDa; Ubiquitin-protein ligase A.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Cow,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	17kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human UBE2A/UBE2B/RAD6:81-152/152
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	The ubiquitin (Ub) pathway involves three sequential enzymatic steps that facilitate the

conjugation of Ub and Ub-like molecules to specific protein substrates. The first step requires the ATP-dependent activation of the Ub C-terminus and the assembly of multi-Ub chains by the Ub-activating enzyme known as the E1 component. The Ub chain is then conjugated to the Ub-conjugating enzyme (E2) to generate an intermediate Ub-E2 complex. The Ub-ligase (E3) then catalyzes the transfer of Ub from E2 to the appropriate protein substrate. UBE2A (Ubiquitin-conjugating enzyme E2 A) and UBE2B (Ubiquitin-conjugating enzyme E2 B) are both Ub-conjugating enzymes that are essential to postreplication repair of UV-damaged DNA. UBE2A and UBE2B are both nuclear and cell membrane proteins that have been found to interact with Rad18.

Function:

Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In association with the E3 enzyme BRE1 (RNF20 and/or RNF40), it plays a role in transcription regulation by catalyzing the monoubiquitination of histone H2B at 'Lys-120' to form H2BK120ub1. H2BK120ub1 gives a specific tag for epigenetic transcriptional activation, elongation by RNA polymerase II, telomeric silencing, and is also a prerequisite for H3K4me and H3K79me formation. In vitro catalyzes 'Lys-11', as well as 'Lys-48'-linked polyubiquitination. Required for postreplication repair of UV-damaged DNA.

Subunit:

Interacts with RAD18 and WAC

DISEASE:

Defects in UBE2A are the cause of mental retardation syndromic X-linked Nascimento-type (MRXSN) [MIM:300860]. Mental retardation is characterized by significantly below average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. MRXSN features include dysmorphic facies, hirsutism, skin and nails abnormalities, obesity, speech anomalies and seizures.

Similarity:

Belongs to the ubiquitin-conjugating enzyme family.

SWISS:

P49459

Gene ID:

7319

Database links:

Entrez Gene: 395672Chicken

Entrez Gene: 282107Cow

Entrez Gene: 7319Human

Entrez Gene: 22209 Mouse

Entrez Gene: 298317Rat

Entrez Gene: 398788 Xenopus laevis

Entrez Gene: 797853Zebrafish

Omim: 312180Human

SwissProt: P49459Human

SwissProt: P63146Human

SwissProt: Q9Z255Mouse

Unigene: 379466Human

Unigene: 395649 Mouse

Important Note:

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This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.