| Basic Information | Catalog Number: CL488-51042 | GenBank Accession Number: | Purification Method: |
| :---: | :---: | :---: | :---: |
|  | CL488-51042 | BC04745 | Antigen affinity purification |
|  | Size: | Geneld (NCBI): | Recommended Dilutions: |
|  | $1000 \mu \mathrm{~g} / \mathrm{ml}$ | 54514 | IF 1:50-1:500 |
|  | Source: | UNIPROT ID: | Excitation/Emission maxima |
|  | Rabbit | Q9NOIO | wavelengths: |
|  | Isotype: | Full Name: | $493 \mathrm{~nm} / 522 \mathrm{~nm}$ |
|  | IgG | DEAD (Asp-Glu-Ala-Asp) box |  |
|  | Immunogen Catalog Number: | polypeptide 4 |  |
|  | AG0447 | Calculated MW: |  |
|  |  | 690aa,76 kDa; 724aa,79 kDa |  |
|  |  | Observed MW: |  |
|  |  | 79 kDa |  |
| Applications | Tested Applications: | Positive Controls: |  |
|  | IF-P | IF : mouse testis tissue, |  |
|  | Species Specificity: |  |  |
|  | human, mouse |  |  |

# Background Information <br> DEAD box proteins are characterized by nine conserved sequence motifs located on two functional domains. Domain I contains six of these motifs, including the Q motif and the Walker A motif, motifs Ia and Ib, the Walker B motif, and motif III, which may act to link ATPase and helicase activities of the protein [PMID:21653890]. DDX4, a member of the DEAD box family of ATP-dependent RNA helicases, plays a central role in several aspects of germ cell development. Its function is not only required during gametogenesis in the adult but is also essential for the specification of the germ cell tineage during embryogenesis [PMID:20016130]. 

Storage
Storage:
Store at $-20^{\circ} \mathrm{C}$. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50\% Glycerol, 0.05\% Proclin300, 0.5\% BSA, pH 7.3 .
Aliquoting is unnecessary for $-20^{\circ} \mathrm{C}$ storage

## Selected Validation Data



Immunofluorescent analysis of (4\% PFA) fixed
Immunofluorescent analysis of (4\% PFA) fixed
mouse testis tissue using CoraLite® Plus 488
mouse testis tissue using CoraLite ${ }^{\circledR}$ Plus 488
DDK4,VASA antibody (CL488-51042) at dilution of
1:200.

