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# ZNF521 Antibody
**Catalog # ASC11486**

## Specification

### ZNF521 Antibody - Product Information

| | |
|---|---|
| Application | **WB, IF, ICC, E** |
| Primary Accession | Q96K83 |
| Other Accession | NP_056276, 24308069 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **IgG** |
| Calculated MW | **Predicted: 144 kDa**<br>**Observed: 145 kDa KDa** |
| Application Notes | **ZNF521 antibody can be used for detection of ZNF521 by Western blot at 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 2.5 µg/mL. For immunofluorescence start at 2.5 µg/mL.** |

### ZNF521 Antibody - Additional Information

Gene ID **25925**

**Target/Specificity**
ZNF521; ZNF521 antibody is human specific.

**Reconstitution & Storage**
ZNF521 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**
ZNF521 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### ZNF521 Antibody - Protein Information

**Name** ZNF521

**Synonyms** EHZF, LIP3

**Function**
Transcription factor that can both act as an activator or a repressor depending on the context. Involved in BMP signaling and in the regulation of the immature compartment of the hematopoietic system. Associates with SMADs in response to BMP2 leading to activate transcription of BMP target genes. Acts as a transcriptional repressor via its interaction with EBF1, a transcription factor involved specification of B-cell lineage; this interaction preventing EBF1 to

bind DNA and activate target genes.

**Cellular Location**
Nucleus.

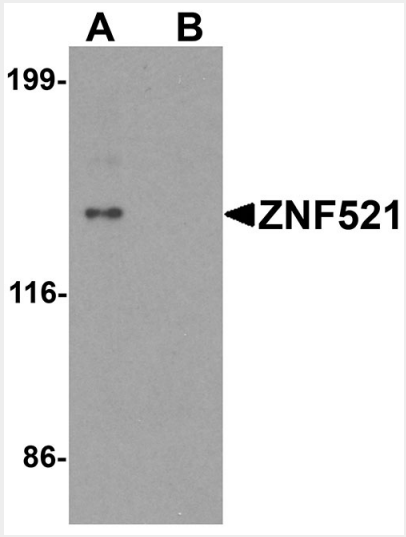
**Tissue Location**
Predominantly expressed in hematopoietic cells. Present in organs and tissues that contain stem and progenitor cells, myeloid and/or lymphoid: placenta, spleen, lymph nodes, thymus, bone marrow and fetal liver. Within the hematopoietic system, it is abundant in CD34(+) cells but undetectable in mature peripheral blood leukocytes, and its levels rapidly decrease during the differentiation of CD34(+) cells in response to hemopoietins

## ZNF521 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## ZNF521 Antibody - Images




Western blot analysis of ZNF521 in HeLa cell lysate with ZNF521 antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.

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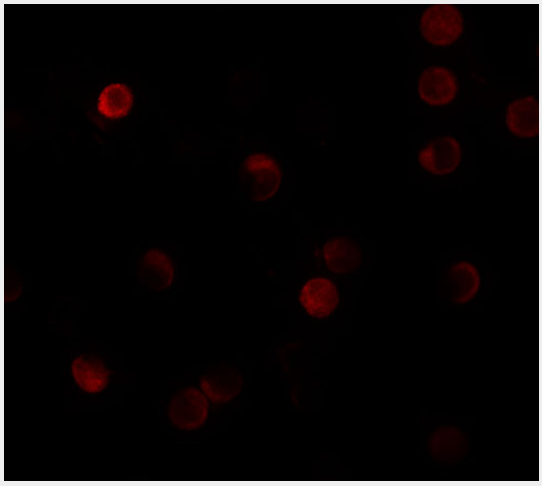
Immunocytochemistry of ZNF521 in HeLa cells with ZNF521 antibody at 2.5 µg/mL.



Immunofluorescence of ZNF521 in HeLa cells with ZNF521 antibody at 20 µg/mL.

## ZNF521 Antibody - Background

ZNF521 Antibody: The zinc finger protein 521 (ZNF521) is a transcription factor containing an N-terminal transcriptional repressor motif and 30 zinc finger domains. It plays a role in both erythroid cell and osteoblast differentiation during development, inhibiting the activities of early B-cell factor 1 (EBF1) in erythroid cells and Runx2 in osteoblast precursors. ZFP521 binds to both Runx2 and histone deacetylase 3 (HDAC3), promotes their association and antagonizes Runx2 transcriptional activity in a HDAC3-dependent manner, thereby regulating osteoblast differentiation, skeletal development, and bone homeostasis.

## ZNF521 Antibody - References

Warming S, Liu P, Suzuki T, et al. Evi3, a common retroviral integration site in murine B-cell lymphoma, encodes a EBFAZ-related Kruppel-like zinc finger protein. Blood 2003; 101:1934-40.
Matsubara E, Sakai I, Yamanouchi J, et al. The role of zinc finger protein 521/early hematopoietic zinc finger protein in erythroid cell differentiation. J. Biol. Chem. 2009; 284:3480-7.
Wu M, Hesse E, Morvan F, et al. Zfp521 antagonizes Runx2, delays osteoblast differentiation in vitro, and promotes bone formation in vivo. Bone 2009; 44:528-36.
Hesse E, Saito H, Kiviranta R, et al. Zfp521 controls bone mass by HDAC3-dependent attenuation of Runx2 activity. J. Cell Biol. 2010; 191:1271-83